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|---|---|
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ABSTRACT

The coding system used to classify items in the Instructional Program Planning and Evaluation System (IPPES) Master Objectives Bank is explained. Objectives for 67 topics in mathematics are organized by grade level for each of the grades from kindergarten through six, and their code numbers are specified. (For a listing of objectives by topic, see SE 016 295.) This work was prepared under an ESEA Title III contract. (DT)

ED 077736

# I.P.P.E.S. MASTER OBJECTIVES

# MATHEMATICS (K-6) CATAL

JACKSON PUBLIC SCHOOLS
INSTRUCTIONAL PROGRAM
PLANNING & EVALUATION SYSTEM
290 WEST MICHIGAN AVENUE
JACKSON, MICHIGAN 49201

Funded under Title III, ESEA of 1965,
Michigan Department of Education Project Number 0621

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SE 016 296

# MASTER OBJECTIVES BANK

# EMATICS (K-6) CATALOG

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ESEA TITLE III

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## ITEM CODE NUMBERS

Each item of the I.P.P.E.S. Master Objectives Bank is coded with a ten digit numeral. user to categorize a given objective or to locate a needed objective according to a number of

1. Subject matter major classification. Initially IPPES will provide objectives in fi and grammar, (c) science, (d) social studies, and (e) writing skills and written ex left to right) indicate subject matter:

   (a) 00XXXXXXXX = mathematics

   (b) 01XXXXXXXX = reading

   (c) 02XXXXXXXX = science

   (d) 03XXXXXXXX = social studies

   (e) 04XXXXXXXX = writing

2. Grade Level. The grade level at which an objective is normally or traditionally in into the third and fourth digits of the code number. The first issue of the catalo through grade six according to the following code:

   (a) XX00XXXXXX = kindergarten

   (b) XX01XXXXXX = first grade

   (c) XX02XXXXXX = second grade

   (d) XX03XXXXXX = third grade

   (e) XX04XXXXXX = fourth grade

   (f) XX05XXXXXX = fifth grade

   (g) XX06XXXXXX - sixth grade

3. Topic of Instructional Unit: The fifth, sixth, and seventh digits indicate the topi the objective. Each subject matter major classification may be divided into one th The three digit numerals assigned to topics specific to this catalog are found on t the body of the catalog all objectives associated with a topic are grouped within g and are associated with a seven digit number.

## ITEM CODE NUMBERS

tives Bank is coded with a ten digit numeral. The system chosen makes it easy for any
e a needed objective according to a number of factors:

Initially IPPES will provide objectives in five areas: (a) mathematics, (b) reading
studies, and (e) writing skills and written expression. The first two digits (from
r:

cs

udies

h an objective is normally or traditionally introduced into the curriculum is coded
he code number. The first issue of the catalogs covers the grade span from kindergarten
llowing code:

ten

de

ade

de

ade

de

de

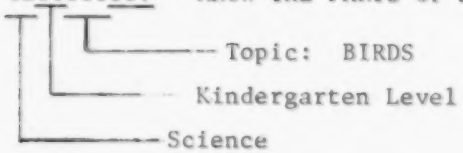
th, sixth, and seventh digits indicate the topic of the instructional unit covered by
ajor classification may be divided into one thousand topics within each grade level.
topics specific to this catalog are found on the following Topic Summary Sheet. Within
s associated with a topic are grouped within grade levels. Topic headings are given
number.

4. Objective Within Topic. A maximum of one thousand objectives may be grouped under
eighth, ninth, and tenth digits of the code number indicate the objective within th

SPECIFIC EXAMPLES OF CODING

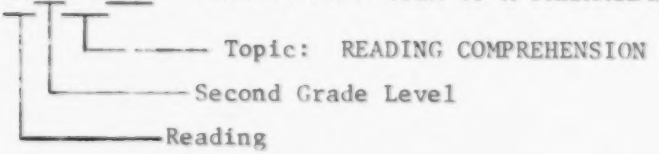
1. Science

0200060007 KNOW THE PARTS OF A CHICKEN EGG. (Seventh objective within topic)



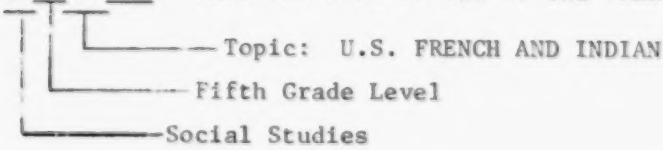

2. Reading

0102025001 SELECTS MAIN IDEA OF A PARAGRAPH. (First objective within topic)




3. Social Studies

0305295002 NAME THE MAIN CAUSES OF THE FRENCH AND INDIAN WAR. (Second objective w



f one thousand objectives may be grouped under one Instructional Unit Topic. The
he code number indicate the objective within the topic.

SPECIFIC EXAMPLES OF CODING

CKEN EGG. (Seventh objective within topic)

PARAGRAPH. (First objective within topic)

EHENSION

THE FRENCH AND INDIAN WAR. (Second objective within topic)

ND INDIAN WAR.

MATHEMATICS TOPIC SUMMARY SHEET
Grades K-6

| CODE | TOPIC | CODE |
|---|---|---|
| 000 | Absolute Value | 170 |
| 005 | Addition | 175 |
| 010 | Addition (Word Problems) | 180 |
| 015 | Bases | 185 |
| 020 | Clock (Module) Arithmetic | 190 |
| 025 | Decimals | 195 |
| 030 | Division | 200 |
| 035 | Estimation | 205 |
| 040 | Exponential Notation | 210 |
| 045 | Fractions | 215 |
| 050 | Geometry (Coordinate Systems) | 220 |
| 055 | Geometry (plane figures) - angles - | 225 |
| 060 | Geometry (plane figures) - circle - | 230 |
| 065 | Geometry (plane figures) - congruence - | 235 |
| 070 | Geometry (plane figures) - constructions - | 240 |
| 075 | Geometry (plane figures) - ellipse - | 245 |
| 080 | Geometry (plane figures) - lines - | 250 |
| 085 | Geometry (plane figures) - open/closed figures - | 255 |
| 090 | Geometry (plane figures) - polygons - | 260 |
| 095 | Geometry (plane figures) - quadrilaterals - | 265 |
| 100 | Geometry (plane figures) - sets of points - | 270 |
| 105 | Geometry (plane figures) - similarity - | 275 |
| 110 | Geometry (plane figures) - sumbols and notation - | 280 |
| 115 | Geometry (plane figures) - symmetry - | 285 |
| 120 | Geometry (plane figures) - terminology - | 290 |
| 125 | Geometry (plane figures) - triangle - | 295 |
| 130 | Geometry (Size and Shape) | 300 |
| 135 | Geometry (Solids) | 305 |
| 140 | Geometry (Space Relationships) | 310 |
| 145 | Graphs | 315 |
| 150 | Inverse (Additive) | 320 |
| 155 | Inverse (Multiplicative) | 325 |
| 160 | Mathematical Systems (Finite and Nonfinite) | 330 |
| 165 | Measurement (Area) | |

MATHEMATICS TOPIC SUMMARY SHEET
Grades K-6

| CODE | TOPIC |
|---|---|
| 170 | Measurement (Dry) |
| 175 | Measurement (Instruments) |
| 180 | Measurement (Linear) |
| 185 | Measurement (Liquid) |
| 190 | Measurement (Precision) |
| 195 | Measurement (Rate) |
| 200 | Measurement (Relative) |
| 205 | Measurement (Temperature) |
| 210 | Measurement (Time) |
| 215 | Measurement (Volume) |
| 220 | Multiplication |
| 225 | Number Sentences |
| 230 | Number Systems (Early) |
| 235 | Numbers (Integers) |
| 240 | Numbers (Prime - Composite) |
| 245 | Numbers (Rational and Irrational) |
| 250 | Numbers (whole) |
| 255 | Numerals |
| 260 | Patterns |
| 265 | Percentage |
| 270 | Place Value |
| 275 | Probability |
| 280 | Proportion |
| 285 | Ratio |
| 290 | Scientific Notation |
| 295 | Sets |
| 300 | Simplest Terms |
| 305 | Square Root |
| 310 | Statistics |
| 315 | Subtraction |
| 320 | Subtraction (Word Problems) |
| 325 | Value of Coins |
| 330 | Word Problem Solution Strategies |

s -
e -
uence -
ructions -
se -
-
closed figures -
ons -
ilaterals -
of points -
arity -
ls and notation -
try -
nology -
gle -

Nonfinite)

| | |
|---|---|
| 0000005 | ADDITION |
| 0000005001 | USING A PICTURE OF TWO SETS OF OBJECTS ADD TWO NUMBERS WHERE THE |
| 0000005002 | USING A NUMBER LINE, ADD TWO NUMBERS WHERE THE SUM IS 10 OR LESS. |
| 0000005003 | ADD TWO 1 DIGIT NUMBERS. |
| 0000005004 | ADD TWO 1 DIGIT NUMBERS VERTICALLY AND/OR HORIZONTALLY WHERE THE |
| 0000060 | GEOMETRY |
| 0000060001 | GIVEN A MODEL OF A CIRCLE, IDENTIFY AND NAME THIS GEOMETRIC |
| 0000095001 | GIVEN A MODEL OF A SQUARE, IDENTIFY AND NAME THIS GEOMETRIC |
| 0000095002 | GIVEN A MODEL OF A RECTANGLE, IDENTIFY AND NAME THIS GEOMETRIC |
| 0000125001 | GIVEN A MODEL OF A TRIANGLE, IDENTIFY AND NAME THIS GEOMETRIC |
| 0000135001 | GIVEN SET OF SOLID SHAPES (CONES, PYRAMIDS) NAME AND SORT THEM |
| 0000135002 | GIVEN A SET OF SOLID SHAPES OF CUBES, SPHERES, AND CYLINDERS CATEGORIES. |
| 0000140001 | USE THE TERMS INSIDE, OUTSIDE, AND ON AS RELATED TO SOLID FIG |
| 0000140002 | INDICATE WHEN A GIVEN OBJECT IS BELOW, BESIDE AND BETWEEN I |

S OF OBJECTS ADD TWO NUMBERS WHERE THE SUM IS 10 OR LESS.

O NUMBERS WHERE THE SUM IS 10 OR LESS.

RTICALLY AND/OR HORIZONTALLY WHERE THE SUM IS 10 OR LESS.

IDENTIFY AND NAME THIS GEOMETRIC FIGURE.

IDENTIFY AND NAME THIS GEOMETRIC FIGURE.

LE, IDENTIFY AND NAME THIS GEOMETRIC FIGURE.

E, IDENTIFY AND NAME THIS GEOMETRIC FIGURE.

CONES, PYRAMIDS) NAME AND SORT THEM ACCORDING TO THEIR CATEGORIES.

S OF CUBES, SPHERES, AND CYLINDERS, NAME AND SORT THEM ACCORDING TO THEIR

IDE, AND ON AS RELATED TO SOLID FIGURES.

CT IS BELOW, BESIDE AND BETWEEN IN RELATIONSHIP TO ONE OR MORE OTHER OBJECTS.

0000175 MEASUREMENT

0000175001 DEFINE CALENDAR.

0000175002 DEFINE CLOCK.

0000175003 DEFINE THERMOMETER.

0000180001 DEFINE RULER.

0000200001 USE APPROPRIATELY SUCH WORDS AS LONGER, SHORTER, HEAVIER, LIGHT

0000210001 TELL THE NAME OF THE MONTH AND THE DAY OF THE WEEK.

0000210002 MAKE COMPARISONS IN TIME AND COUNT WHOLE UNITS OF TIME (DAY, WEEK, MO

0000255 NUMERALS

0000255001 KNOW THAT A NUMBER IS AN IDEA.

0000255002 GIVEN SETS OF ELEMENTS (PICTURE OR CONCRETE) SOME OF WHICH ARE EMPT
AND IDENTIFY NUMERAL 0 AS REPRESENTING THE NUMBER OF THE SET.

0000255003 GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH HAVE CAR
CONTAIN ONE MEMBER EACH AND IDENTIFY NUMERAL 1 AS REPRESENTING T

0000255004 GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH HAVE THE
WHICH CONTAIN TWO MEMBERS EACH AND IDENTIFY THE NUMERAL 2 AS REPRESENT

0000255005 GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH HAVE THE
WHICH CONTAIN THREE MEMBERS EACH AND IDENTIFY NUMERAL 3 AS REPRESENT

0000255006 GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH HAVE THE
WHICH CONTAIN FOUR MEMBERS EACH AND IDENTIFY NUMERAL 4 AS REPRESENTIN

LONGER, SHORTER, HEAVIER, LIGHTER, LOWER, LARGER, SMALLER.

THE DAY OF THE WEEK.

UNT WHOLE UNITS OF TIME (DAY, WEEK, MONTH, YEAR).

OR CONCRETE) SOME OF WHICH ARE EMPTY SETS, LOCATE THE SETS WHICH ARE EMPTY
SENTING THE NUMBER OF THE SET.

S OR CONCRETE) SOME OF WHICH HAVE CARDINAL NUMBER OF ONE, LOCATE THE SETS WHICH
NTIFY NUMERAL 1 AS REPRESENTING THE MEMBER.

S OR CONCRETE) SOME OF WHICH HAVE THE CARDINAL NUMBER OF TWO. LOCATE THE SETS
AND IDENTIFY THE NUMERAL 2 AS REPRESENTING THE NUMBER OF THE SET.

S OR CONCRETE) SOME OF WHICH HAVE THE CARDINAL NUMBER OF THREE, LOCATE THE SETS
H AND IDENTIFY NUMERAL 3 AS REPRESENTING THE NUMBER OF THE SET.

S OR CONCRETE) SOME OF WHICH HAVE THE CARDINAL NUMBER OF FOUR, LOCATE THE SETS
AND IDENTIFY NUMERAL 4 AS REPRESENTING THE NUMBER OF THE SETS.

| | | |
|---|---|---|
| 0000255007 | GIVEN SETS OF ELEMENTS (PICTURE OR CONCRETE) SOME OF WHICH CONTAINS FIVE MEMBERS EACH AND IDENTIFY NUMERAL 5 | WHICH HA AS REPRE |
| 0000255008 | GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN SIX MEMBERS EACH AND IDENTIFY NUMERAL 6 | WHICH HA AS REPRE |
| 0000255009 | GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN SEVEN MEMBERS EACH AND IDENTIFY NUMERAL 7 | WHICH HA AS REPRE |
| 0000255010 | GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN EIGHT MEMBERS EACH AND IDENTIFY NUMERAL 8 | WHICH HA AS REPRE |
| 0000255011 | GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN NINE MEMBERS EACH AND IDENTIFY NUMERAL 9 | WHICH HA AS REPRE |
| 0000255012 | GIVEN SETS OF ELEMENTS (PICTURES OR CONCRETE) SOME OF WHICH CONTAIN TEN MEMBERS EACH AND IDENTIFY NUMERAL 10 | WHICH HA AS REPRE |
| 0000255013 | IDENTIFY THE NUMERALS 0 THROUGH 9. | |
| 0000255014 | GIVEN A GROUP OF NO MORE THAN 10 OBJECTS, COUNT THE | OBJECTS. |
| 0000255015 | GIVEN A POINT ON A NUMBER LINE, WRITE THE CORRESPONDING | NUMBER FR |
| 0000255016 | GIVEN A SET OF NUMERAL FLASH CARDS, 0 THROUGH 10, | ARRANGE T |
| 0000255017 | PROVIDED WITH PROPER MATERIALS, SUCH AS, PENCIL, PAPER, | OR CHALK |
| 0000255018 | MATCH THE WORD FORMS OF THE NUMBERS 0-10 WITH THE | CORRECT N |
| 0000255019 | COUNT ORALLY BY MATCHING NUMERALS WITH SETS HAVING A | GIVEN NUM |
| 0000255020 | SELECT THE SET OF OBJECTS ASSOCIATED WITH A GIVEN | NUMBER. |

TURE OR CONCRETE) SOME OF WHICH HAVE THE CARDINAL NUMBER OF FIVE, LOCATE THE SET
EACH AND IDENTIFY NUMERAL 5 AS REPRESENTING THE NUMBER OF THE SET.

TURES OR CONCRETE) SOME OF WHICH HAVE THE CARDINAL NUMBER OF SIX, LOCATE THE SETS
ACH AND IDENTIFY NUMERAL 6 AS REPRESENTING THE NUMBER OF THE SET.

TURES OR CONCRETE) SOME OF WHICH HAVE THE CARDINAL NUMBER OF SEVEN, LOCATE THE SET
EACH AND IDENTIFY NUMERAL 7 AS REPRESENTING THE NUMBER OF THE SET.

TURES OR CONCRETE) SOME OF WHICH HAVE THE CARDINAL NUMBER OF EIGHT, LOCATE THE SET
EACH AND IDENTIFY NUMERAL 8 AS REPRESENTING THE NUMBER OF THE SET.

TURES OR CONCRETE) SOME OF WHICH HAVE THE CARDINAL NUMBER OF NINE LOCATE THE SETS
EACH AND IDENTIFY NUMERAL 9 AS REPRESENTING THE NUMBER OF THE SET.

TURES OR CONCRETE) SOME OF WHICH HAVE THE CARDINAL NUMBER OF TEN, LOCATE THE SETS
ACH AND IDENTIFY NUMERAL 10 AS REPRESENTING THE NUMBER OF THE SET.

OUGH 9.

AN 10 OBJECTS, COUNT THE OBJECTS.

INE, WRITE THE CORRESPONDING NUMBER FROM 0-10 FOR THE POINT.

H CARDS, 0 THROUGH 10, ARRANGE THEM IN THE CORRECT SEQUENCE.

ALS, SUCH AS, PENCIL, PAPER, OR CHALK, CORRECTLY WRITE THE NUMERALS 0 THROUGH 10.

NUMBERS 0-10 WITH THE CORRECT NUMERALS.

MERALS WITH SETS HAVING A GIVEN NUMBER OF OBJECTS.

SSOCIATED WITH A GIVEN NUMBER.

0000255021 WRITE THE NUMERAL FOR A GIVEN SET OF 0-10 OBJECTS.

0000255022 COUNT MEMBERS OF SETS IN THEIR PROPER ORDER THROUGH 10.

0000255023 GIVEN TEN NON-EQUIVALENT SETS, ARRANGE THE SETS IN ORDER.

0000255024 GIVEN GROUPS OF OBJECTS (NO MORE THAN 10) ORGANIZE FROM LARGEST TO SM

0000255025 GIVEN TWO NUMBERS (VERBAL OR SETS OF OBJECTS OR PICTURES) SUC
SAYING SEVEN IS GREATER THAN THREE OR THREE IS LESS THAN SEVEN.

0000255026 GIVEN A SEQUENCE OF OBJECTS, PEOPLE, ETC, IDENTIFY THE ORDINAL NUMBE

0000255027 IN RANDOM ORDER, SHOW WHICH OBJECT IS FIRST TO FIFTH IN A GIVEN SE

0000255028 COUNT OBJECTS FROM 0-100 ORALLY.

0000255029 COUNT ORALLY BY STEPS TO 100.

0000260 PATTERNS

0000260001 COPY A GIVEN PATTERN OF OBJECTS OR SHAPES.

0000260002 GIVEN A SERIES OF OBJECTS OR SHAPES IN A PATTERN, DESCRIBE THE

0000260003 GIVEN A SIMPLE PATTERN, SUCH AS A TRIANGLE, A SQUARE, AND A TRIANGL

0000260004 AFTER SEEING A GIVEN PATTERN OF OBJECTS THAT HAS NO MORE THAN THREE PA
OF OBJECTS.

ET OF 0-10 OBJECTS.

PROPER ORDER THROUGH 10.

ARRANGE THE SETS IN ORDER.

E THAN 10) ORGANIZE FROM LARGEST TO SMALLEST AND SMALLEST TO LARGEST.

TS OF OBJECTS OR PICTURES) SUCH AS SEVEN AND THREE, ORDER THEM BY
HREE OR THREE IS LESS THAN SEVEN.

OPLE, ETC, IDENTIFY THE ORDINAL NUMBER IN THE SEQUENCE.

ECT IS FIRST TO FIFTH IN A GIVEN SET OF OBJECTS ARRANGED IN A ROW.

.

S OR SHAPES.

HAPES IN A PATTERN, DESCRIBE THE NEXT STEP OF THE PATTERN.

A TRIANGLE, A SQUARE, AND A TRIANGLE, EXTEND THE PATTERN.

OBJECTS THAT HAS NO MORE THAN THREE PARTS, REPRODUCE FROM MEMORY THE SAME PATTERN

| | |
|---|---|
| 0000270 | PLACE VALUE |
| 0000270001 | RECOGNIZE THE NUMBER OF TENS AND THE NUMBER OF ONES IN A GIVEN 2 D |
| 0000295 | SETS |
| 0000295001 | KNOW THAT A SET IS AN AGGREGATE, GROUP OR COLLECTION OF OBJECTS O |
| 0000295002 | KNOW THAT A SET MAY BE IDENTIFIED EITHER BY LISTING OR DESCRIBIN |
| 0000295003 | GIVEN A GROUP OF OBJECTS WITH ONE OBJECT DIFFERENT FROM THE REST, |
| 0000295004 | RECOGNIZE THE SMALLEST OR LARGEST OBJECT IN A GROUP OF OBJECTS. |
| 0000295005 | GIVEN A GROUP OF OBJECTS, RECOGNIZE THOSE THAT ARE THE SAME SIZE ARE THE SAME COLOR. |
| 0000295006 | GIVEN A SET OF OBJECTS, COMPARE THEM AND IDENTIFY AND NAME THE |
| 0000295007 | RECOGNIZE THE SIMILARITIES OF GIVEN OBJECTS: SIZE, WEIGHT, P |
| 0000295008 | GIVEN AN OBJECT, IDENTIFY ITS POSITION IN RELATION TO ANOTHER O MARK PICTURES ACCORDING TO DIRECTIONS GIVEN BY THE TEACHER. |
| 0000295009 | GIVEN SETS OF PICTURES DEPICTING DIFFERENCES IN SIZE AS LONGER, S PICTURE ACCORDING TO DIRECTIONS GIVEN BY THE TEACHER. |
| 0000295010 | GIVEN A VERBAL DESCRIPTION OF A SET, DISTINGUISH BETWEEN MEMBERS O |
| 0000295011 | THE SET THAT CONTAINS NO MEMBERS IS CALLED THE EMPTY SET. |
| 0000295012 | GIVEN PAIRS OF SETS, COMPARE THE SETS BY VISUAL INSPECTIO TO DIRECTIONS GIVEN BY THE TEACHER. |

S AND THE NUMBER OF ONES IN A GIVEN 2 DIGIT NUMBER.

GATE, GROUP OR COLLECTION OF OBJECTS OR IDEAS THAT WE WISH TO TREAT TOGETHER.

TIFIED EITHER BY LISTING OR DESCRIBING ITS MEMBERS.

TH ONE OBJECT DIFFERENT FROM THE REST, RECOGNIZE THE OBJECT THAT IS DIFFERENT.

ARGEST OBJECT IN A GROUP OF OBJECTS.

ECOGNIZE THOSE THAT ARE THE SAME SIZE, THOSE THAT ARE THE SAME SHAPE, OR THOSE THAT

ARE THEM AND IDENTIFY AND NAME THE HEAVIEST AND LIGHTEST.

F GIVEN OBJECTS: SIZE, WEIGHT, POSITION, COLOR, SHAPE, COMPOSITION, USE.

S POSITION IN RELATION TO ANOTHER OBJECT (IN, ON, OVER, UNDER, BESIDE) AND WILL
IRECTIONS GIVEN BY THE TEACHER.

TING DIFFERENCES IN SIZE AS LONGER, SHORTER, TALLER, LARGER, SMALLER, MARK THE
ONS GIVEN BY THE TEACHER.

F A SET, DISTINGUISH BETWEEN MEMBERS OF THE SET AND THINGS WHICH ARE NOT MEMBERS.

BERS IS CALLED THE EMPTY SET.

THE SETS BY VISUAL INSPECTION AND FIND THE LARGER OR SMALLER SET ACCORDING
EACHER.

0000295013 USE SUCH TERMS AS MORE THAN, AS MANY AS, FEWER THAN WHEN COMPARING

0000295014 TWO SETS THAT CONTAIN THE SAME MEMBERS ARE SAID TO BE EQUAL.

0000295015 GIVEN TWO EQUIVALENT SETS (OBJECTS OR PICTURES) THROUGH ONE-TO-ONE MAT

0000295016 GIVEN TWO NON-EQUIVALENT SETS (OBJECTS OR PICTURES) THROUGH ONE-TO EQUIVALENT.

0000295017 UTILIZE THE IDEA ONE MORE THAN IN ORGANIZING SETS IN THE NATURAL OR

0000295018 IDENTIFY, WITHOUT COUNTING, THE NUMBER OF SETS WITH TWO, THREE, OR FOUR

0000295019 COMPARE TWO NON-MATCHING SETS OF FEWER THAN 10 OBJECTS AND DECIDE WHI HAS FEWER MEMBERS.

0000295020 DETERMINE WHETHER TWO SETS ARE EQUIVALENT (CAN BE MATCHED OR PLA

0000295021 IDENTIFY TWO EQUIVALENT SETS BY PLACING THE MEMBERS OF THE SET IN ONE

0000295022 DETERMINE THAT 3 IS GREATER THAN 2 AND THAT 2 IS LESS THAN 3 BY COMP THIS FOR ANY TWO NUMBERS LESS THAN 6.

0000295023 REARRANGE SETS OF OBJECTS TO DEMONSTRATE THE JOINING OF SETS, AND THER

0000295024 GIVEN TWO SETS, JOIN THE TWO SETS AND GET A THIRD SET.

0000295025 DEMONSTRATE IF YOU JOIN A SET OF ONE ELEMENT TO A SET CONTAINING TWO SET OF TWO ELEMENTS WITH A SET OF ONE ELEMENT.

0000295026 GIVEN A SET OF ELEMENTS, REMOVE A SET AND GET A REMAINING SET.

MANY AS, FEWER THAN — WHEN COMPARING SETS OF OBJECTS.

EMBERS ARE SAID TO BE — EQUAL.

TS OR PICTURES) THROUGH — ONE-TO-ONE MATCHING, IDENTIFY THE SETS AS EQUIVALENT.

BJECTS OR PICTURES) — THROUGH ONE-TO-ONE MATCHING, IDENTIFY THE SETS AS NON-

IN ORGANIZING SETS IN — THE NATURAL ORDER.

NUMBER OF SETS WITH TWO, — THREE, OR FOUR OBJECTS.

FEWER THAN 10 OBJECTS — AND DECIDE WHICH SET HAS MORE MEMBERS AND WHICH SET

QUIVALENT (CAN BE — MATCHED OR PLACED IN A ONE-TO-ONE CORRESPONDENCE).

PLACING THE MEMBERS OF — THE SET IN ONE-TO-ONE CORRESPONDENCE.

2 AND THAT 2 IS LESS — THAN 3 BY COMPARING APPROPRIATE SETS OF OBJECTS AND DO
AN 6.

ONSTRATE THE JOINING OF — SETS, AND THEREBY DEVELOP A READINESS FOR ADDITION.

S AND GET A THIRD SET.

ONE ELEMENT TO A SET — CONTAINING TWO ELEMENTS, IT IS THE SAME AS JOINING A
F ONE ELEMENT.

A SET AND GET A — REMAINING SET.

| | | |
|---|---|---|
| 0000295027 | SOLVE SIMPLE ADDITION PROBLEMS WHERE THE SUM OF THE THE ORALLY PROPOSED PROBLEM. COUNTERS MAY BE USED. | PARTS IS |
| 0000295028 | GIVEN A SET OF 10 OBJECTS, CONTAINING TWO OR MORE ORALLY. | SUBSETS, |
| 0000295029 | GIVEN MORE THAN ONE SUBSET, COMBINE SUBSETS AND ORALLY PRODUCES: TO 10. | INDICATE |
| 0000295030 | REARRANGE SETS OF OBJECTS TO DEMONSTRATE THE SEPARATING | OF SETS, |
| 0000295031 | SOLVE SIMPLE SUBTRACTION PROBLEMS BY USING COUNTERS INDICATE THE ANSWER TO THE ORALLY PROPOSED PROBLEMS. | WHEN THE |
| 0000315 | SUBTRACTION | |
| 0000315001 | WITH A PICTURE OF TWO SETS OF OBJECTS, SUBTRACT A 1 | DIGIT NU |
| 0000315002 | WITH A NUMBER LINE, SUBTRACT A 1 DIGIT NUMBER FROM A | LARGER 1 |
| 0000325 | VALUE OF COINS | |
| 0000325001 | RECOGNIZE PENNIES, NICKELS, DIMES. | |
| 0000325002 | IDENTIFY A PENNY, NICKEL, DIME AND TELL THE VALUE OF | EACH. |
| 0000325003 | FIND THE VALUE OF A GIVEN GROUP OF PENNIES, NICKELS, AND | DIMES TH |

EMS WHERE THE SUM OF THE PARTS IS 5 OR LESS BY ORALLY INDICATING THE ANSWER TO
COUNTERS MAY BE USED.

CONTAINING TWO OR MORE SUBSETS, IDENTIFY THE NUMBER OF SUBSETS WITHIN THE SET

COMBINE SUBSETS AND ORALLY INDICATE HOW MANY THE COMBINATION OF THE SUBSETS

DEMONSTRATE THE SEPARATING OF SETS, THEREBY DEVELOPING A READINESS FOR SUBTRACTION.

OBLEMS BY USING COUNTERS WHEN THE PARTS OF THE WHOLE EQUAL 5 OR LESS. ORALLY
ORALLY PROPOSED PROBLEMS.

OF OBJECTS, SUBTRACT A 1 DIGIT NUMBER FROM A LARGER 1 DIGIT NUMBER.

A 1 DIGIT NUMBER FROM A LARGER 1 DIGIT NUMBER.

DIMES.

ME AND TELL THE VALUE OF EACH.

ROUP OF PENNIES, NICKELS, AND DIMES THAT TOTAL LESS THAN $1.00.

0001005 ADDITION

0001005001 IDENTIFIES THE ADDITIVE PROPERTY OF 0.

0001005002 MANIPULATES OBJECTS TO ILLUSTRATE ADDITION FACTS THROUGH 5.

0001005003 SELECTS OTHER NAMES FOR NUMBERS BY MATCHING ADDITION EXPRESSIONS W

0001005004 IDENTIFIES CARDINAL NUMBER IN EACH OF TWO SETS TOGETHER THROUGH 5.

0001005005 STUDENT SUPPLIES THE SYMBOLS FOR PLUS (+), AND EQUAL TO (=) TO REPLAC

0001005006 IDENTIFIES EQUAL SIGN (=) AND ITS MEANING WHEN USED IN AN EQUATION.

0001005007 USE THE SYMBOLS +, AND = TO FORM SENTENCES SUCH AS 3 + 6 = 9.

0001005008 SOLVES EQUATIONS OF SUMS TO 5 (FIRST HORIZONTAL; THEN VERTICAL).

0001005009 MANIPULATES OBJECTS TO ILLUSTRATE ADDITION FACTS 6-9.

0001005010 SELECTS OTHER NAMES FOR NUMBERS BY MATCHING ADDITION EXPRESSIONS W

0001005011 IDENTIFIES CARDINAL NUMBER IN EACH OF TWO SETS AND IN BOTH SETS TOG

0001005012 SOLVES EQUATIONS OF SUMS (6-9); (FIRST HORIZONTAL; THEN VERTICAL

0001005013 MANIPULATES OBJECTS TO ILLUSTRATE COMBINATIONS OF TEN.

0001005014 SELECTS OTHER NAMES FOR 10 WITH PICTURE GROUPS OR NUMERALS.

Y OF 0.

TE ADDITION FACTS THROUGH 5.

S BY MATCHING ADDITION EXPRESSIONS WITH PICTURED GROUPS OF NUMERALS TO 5.

ACH OF TWO SETS TOGETHER THROUGH 5.

R PLUS (+), AND EQUAL TO (=) TO REPLACE THE WORDS IN A NUMBER SENTENCE.

TS MEANING WHEN USED IN AN EQUATION.

M SENTENCES SUCH AS 3 + 6 = 9.

IRST HORIZONTAL; THEN VERTICAL).

TE ADDITION FACTS 6-9.

S BY MATCHING ADDITION EXPRESSIONS WITH PICTURED GROUPS OR NUMERALS 6-9.

ACH OF TWO SETS AND IN BOTH SETS TOGETHER EQUALING 6-9.

(FIRST HORIZONTAL; THEN VERTICAL).

TE COMBINATIONS OF TEN.

TH PICTURE GROUPS OR NUMERALS.

| | |
|---|---|
| 0001005015 | IDENTIFIES CARDINAL NUMBER IN EACH OF TWO SETS AND IN BOTH SET |
| 0001005016 | USE THE ADDITION FACTS THROUGH THE SUM OF 10. |
| 0001005017 | FILLS IN MISSING ADDENDS FROM EQUATIONS WITH SUMS OF 10. |
| 0001005018 | SOLVES EQUATIONS WITH SUM OF 10; (FIRST HORIZONTAL; THEN VER |
| 0001005019 | RECOGNIZE EXAMPLES OF THE COMMUTATIVE PROPERTY FOR ADDITION |
| 0001005020 | GIVEN AN ADDITION EQUATION, WRITES OR COMPLETES A SECOND E<br>FOR ADDITION: TO 10. |
| 0001005021 | FILLS IN NUMBERS (MISSING SUMS) TO MAKE TRUE NUMBER SENTENCES |
| 0001005022 | WRITES = SIGN TO IDENTIFY TRUE STATEMENTS. CREATES TRUE NUMBER SE |
| 0001005023 | IDENTIFIES AN UNKNOWN COMBINATION GREATER THAN 10, USING A K |
| 0001005024 | GIVEN NUMBER SENTENCES, SUMS TO 12, STUDENT ILLUSTRATES ELEMENT O |
| 0001005025 | GIVEN ANY NUMBER TO 12, STUDENT NAMES THAT NUMBER IN ALL POSS |
| 0001005026 | STUDENT USES HORIZONTAL AND VERTICAL ALGORISMS TO SOLVE PROBLEMS |
| 0001005027 | GIVEN NUMBER SENTENCES WITH SUMS TO 12, THE STUDENT WILL ILLUSTRAT |
| 0001005028 | IDENTIFIES THE USE OF PARENTHESES IN ADDITION EQUATIONS CONTAININ |

IN EACH OF TWO SETS AND IN BOTH SETS TOGETHER EQUALING 10.

UGH THE SUM OF 10.

UM EQUATIONS WITH SUMS OF 10.

F 10; (FIRST HORIZONTAL; THEN VERTICAL).

OMMUTATIVE PROPERTY FOR ADDITION IN THE SET OF WHOLE NUMBERS.

WRITES OR COMPLETES A SECOND EQUATION TO ILLUSTRATE THE COMMUTATIVE PRINCIPLE

UMS) TO MAKE TRUE NUMBER SENTENCES FOR PICTURED ADDITION SITUATIONS.

RUE STATEMENTS. CREATES TRUE NUMBER SENTENCES, CHANGING ONLY ONE NUMBER. SUMS TO 10.

NATION GREATER THAN 10, USING A KNOWN COMBINATION.

S TO 12, STUDENT ILLUSTRATES ELEMENT OF IDENTITY 0.

DENT NAMES THAT NUMBER IN ALL POSSIBLE ADDITION COMBINATIONS.

VERTICAL ALGORISMS TO SOLVE PROBLEMS OF ADDITION SUMS TO 12.

SUMS TO 12, THE STUDENT WILL ILLUSTRATE THE COMMUTATIVE PROPERTY.

THESES IN ADDITION EQUATIONS CONTAINING MORE THAN TWO ADDENDS.

0001005029 IDENTIFIES SUMS OF 3 ADDENDS; (FIRST HORIZONTAL; THEN VERTICAL).

0001005030 SOLVES ONE-STEP WORD PROBLEMS WITH PICTURES: TO 10.

0001010 ADDITION (WORD PROBLEMS)

0001010001 SOLVE WORD PROBLEMS IN WHICH TWO 1 DIGIT NUMBERS ARE ADDED AND THE

0001010002 SOLVE WORD PROBLEMS INVOLVING ADDITION OF TWO 2 DIGIT NUMERALS.

0001045 FRACTIONS

0001045001 USES CORRECTLY AND RESPONDS TO USE OF TERMS WHOLE AND ONE-HALF IN

0001045002 STUDENT IDENTIFIES ONE-HALF OF ANY SYMMETRICAL OBJECT.

0001045003 IDENTIFIES ONE-HALF OF A SET OF OBJECTS. LIMIT OF 12.

0001045004 DEMONSTRATE ONE-HALF, ONE-FOURTH, OF A PHYSICAL UNIT.

0001045005 DIVIDES SET OF OBJECTS INTO ONE-HALF, ONE-THIRD, ONE- FOURTH.

0001045006 DIVIDES OBJECTS INTO ONE-HALF, ONE-THIRD, ONE-FOURTH.

0001050 GEOMETRY (COORDINATE SYSTEMS)

(FIRST HORIZONTAL; THEN VERTICAL).

ITH PICTURES: TO 10.

) 1 DIGIT NUMBERS ARE ADDED AND THE SUM IS TEN OR LESS.

DDITION OF TWO 2 DIGIT NUMERALS.

JSE OF TERMS WHOLE AND ONE-HALF IN REFERENCE TO SETS OF OBJECTS.

ANY SYMMETRICAL OBJECT.

OBJECTS. LIMIT OF 12.

H, OF A PHYSICAL UNIT.

-HALF, ONE-THIRD, ONE- FOURTH.

ONE-THIRD, ONE-FOURTH.

0001050001 USE THE NUMBER LINE TO ILLUSTRATE ADDITION AND SUBTRACT

0001060 GEOMETRY (PLANE FIGURES) - CIRCLE -

0001060001 IDENTIFY CIRCLE.

0001060002 REPRODUCE CIRCLE FROM MEMORY.

0001075 GEOMETRY (PLANE FIGURES) - ELIPSE -

0001075001 IDENTIFY ELLIPSE.

0001095 GEOMETRY (PLANE FIGURES) - QUADRILATERALS -

0001095001 IDENTIFY RECTANGLE.

0001095002 REPRODUCE RECTANGLE FROM MEMORY.

0001095003 IDENTIFY SQUARE.

0001095004 REPRODUCE SQUARE FROM MEMORY.

0001125 GEOMETRY (PLANE FIGURES) - TRIANGLE -

0001125001 REPRODUCE TRIANGLE FROM MEMORY.

LUSTRATE ADDITION AND SUBTRACTION PROBLEMS.

CIRCLE -

ORY.

ELIPSE -

QUADRILATERALS -

EMORY.

RY.

TRIANGLE -

MORY.

0001130 GEOMETRY (SIZE AND SHAPE)

0001130001 USE THE TERMS ROUND, FACE, EDGE, CORNER AND SURFACE.

0001130002 OBSERVE DISTINGUISHING FEATURES OF SPHERES, RECTANGULAR PRISMS (BOXES

0001140 GEOMETRY (SPACE RELATIONSHIPS)

0001140001 NAME THE SETS OF POINTS INSIDE, ON, OR OUTSIDE A SIMPLE CLOSED CURVE.

0001140002 RECOGNIZE PHYSICAL REPRESENTATIONS OF POINTS, LINE SEGMENTS, AND

0001170 MEASUREMENT (DRY)

0001170001 IDENTIFIES DOZEN AND HALF DOZEN OBJECTS.

0001175 MEASUREMENT (INSTRUMENTS)

0001175001 IDENTIFY VARIOUS INSTRUMENTS OF MEASUREMENT OF TIME, TEMPERATURE, THERMOMETERS, SCALES, RULERS.

0001180 MEASUREMENT (LINEAR)

0001180001 USE NON-STANDARD UNITS OF LINEAR MEASURE AND LIQUID MEASURE, SUCH PAPER CUP FOR LIQUID MEASURE.

0001180002 RECOGNIZES USE OF RULER AND YARDSTICK IN INCHES AND FEET.

0001180003 DETERMINE WHICH OF TWO LINE SEGMENTS IS THE LONGER OR THE SHORTER,

CORNER AND SURFACE.

OF SPHERES, RECTANGULAR PRISMS (BOXES), CYLINDERS, AND OTHER OBJECTS.

ON, OR OUTSIDE A SIMPLE CLOSED CURVE.

NS OF POINTS, LINE SEGMENTS, AND PORTIONS OF A PLANE (FLAT SURFACES).

OBJECTS.

MEASUREMENT OF TIME, TEMPERATURE, WEIGHT, AND LENGTH, SUCH AS CLOCKS,

MEASURE AND LIQUID MEASURE, SUCH AS A PENCIL OR BOOK FOR LENGTH, AND A

STICK IN INCHES AND FEET.

ENTS IS THE LONGER OR THE SHORTER, OR WHETHER THEY ARE THE SAME LENGTH.

0001180004 FINDS THE INCH MEASURE OF A LINE SEGMENT.

0001185 MEASUREMENT (LIQUID)

0001185001 DEVELOP AN UNDERSTANDING OF GALLON, HALF-GALLON, AS UNITS OF

0001185002 MEASURES WITH CUPS, PINTS, QUARTS.

0001200 MEASUREMENT (RELATIVE)

0001200001 USES CONCRETE OBJECTS AND PICTURES TO COMPARE SIZE, HEIGHT,

0001210 MEASUREMENT (TIME)

0001210001 IS ABLE TO READ CALENDAR.

0001210002 IDENTIFIES NUMBER OF DAYS IN WEEK, MONTH, YEAR.

0001210003 KNOWS TIME PERIODS - HOUR, DAY, WEEK, MONTH.

0001210004 READS NUMERALS TO 12 ON CLOCK FACE ORALLY.

0001210005 WRITE NUMERALS TO 12 ON CLOCK FACE.

0001210006 IDENTIFIES AND DEMONSTRATES HOUR AND HALF HOUR.

LINE SEGMENT.

GALLON, HALF-GALLON, AS UNITS OF LIQUID MEASUREMENT.

UARTS.

CTURES TO COMPARE SIZE, HEIGHT, LENGTH, AND SIZE POSITION.

N WEEK, MONTH, YEAR.

DAY, WEEK, MONTH.

CK FACE ORALLY.

CK FACE.

HOUR AND HALF HOUR.

0001210007 TELL TIME TO THE NEAREST HALF-HOUR.

0001210008 DEMONSTRATE AN UNDERSTANDING OF TELLING TIME BY SETTING THE HANDS OF QUARTER HOUR.

0001210009 RECOGNIZE THE WRITTEN TIME (HOUR, HALF HOUR, QUARTER HOUR AND FIVE FACE.

0001225 NUMBER SENTENCES

0001225001 PLACES GREATER THAN SYMBOL OR LESS THAN SYMBOL BETWEEN TWO NUMBERS T STRUCTURED GROUPS TO 9.

0001225002 THE STUDENT WILL INSERT THE SYMBOLS FOR LESS THAN AND GREATER THAN

0001225003 DEMONSTRATE WITH SETS OF OBJECTS THE RELATIONSHIP BETWEEN SUCH 6 = 4 = 2.

0001225004 FIND THE SOLUTION FOR SENTENCES LIKE 3 + 4 = X AND 5 - 2 = X.

0001225005 WRITE AN APPROPRIATE MATHEMATICAL SENTENCE LIKE 3 + 4 = X FOR A PHYSI PROBLEM SUGGESTS THE OPERATION OF ADDITION.

0001225006 MAKE UP A PROBLEM SITUATION TO FIT A GIVEN MATHEMATICAL SENTENCE INVO

0001225007 WRITE AN APPROPRIATE MATHEMATICAL SENTENCE FOR A STORY PROBLEM WHERE

0001225008 WRITE A NUMBER SENTENCE FOR A GIVEN PICTURED ADDITION OR SUBTRACTIO

0001225009 MAKE UP PROBLEMS FOR GIVEN MATHEMATICAL SENTENCES USING SUBTRACTION.

0001225010 FIND SOLUTIONS FOR SENTENCES LIKE X + Y = 7 IN WHICH MANY CORRECT

HOUR.

F TELLING TIME BY SETTING THE HANDS OF A CLOCK TO A GIVEN HOUR, HALF HOUR, AND

UR, HALF HOUR, QUARTER HOUR AND FIVE MINUTES) REPRESENTED ON A GIVEN CLOCK

LESS THAN SYMBOL BETWEEN TWO NUMBERS TO INDICATE THE GREATER OR LESSER WITHOUT

MBOLS FOR LESS THAN AND GREATER THAN WHEN COMPARING CARDINAL NUMBERS.

TS THE RELATIONSHIP BETWEEN SUCH SENTENCES AS 4 + 2 = 6, 6 - 2 = 4, AND

CES LIKE 3 + 4 = X AND 5 - 2 = X.

CAL SENTENCE (IKE 3 + 4 = X FOR A PHYSICAL SITUATION WHERE THE ACTION OF THE
OF ADDITION.

FIT A GIVEN MATHEMATICAL SENTENCE INVOLVING ADDITION.

CAL SENTENCE FOR A STORY PROBLEM WHERE ACTION SUGGESTS SUBTRACTION.

GIVEN PICTURED ADDITION OR SUBTRACTION PROBLEM.

HEMATICAL SENTENCES USING SUBTRACTION.

IKE X + Y = 7 IN WHICH MANY CORRECT SOLUTIONS ARE POSSIBLE.

0001225011 SELECTS WHICH OF TWO (OR THREE) NUMBERS IS GREATER (GREATES

0001225012 WRITE NUMBER SENTENCES USING 3 DIGIT NUMERALS AND THE SYMBOLS

0001230 NUMBER SYSTEMS (EARLY)

0001230001 EXPLAIN HOW TO WRITE ROMAN NUMERALS BY COMBINING SEVERAL SYMBOLS.

0001255 NUMERALS

0001255001 COUNTS OBJECTS ORALLY FROM ONE TO TEN BY POINTING TO OBJECT A

0001255002 COUNTS ORALLY FROM ONE TO TEN.

0001255003 PLACES AN X ON THE OBJECT WITH THE SPECIFIED ORDINAL POSITION

0001255004 IDENTIFIES THE CARDINAL NUMBER AND NUMERAL OF STRUCTURED GROUPS T

0001255005 IDENTIFIES THE CARDINAL NUMBER AND NUMERAL OF STRUCTURED GROUPS 5

0001255006 PRESENTED WITH NUMBERS 1-9 IN ORDER, READS THEM FROM LEFT TO R

0001255007 WRITES NUMERALS 1 TO 9 FROM LEFT TO RIGHT ON AN ORDERED SET OF P

0001255008 TELLS WHAT NUMBER COMES BEFORE OR AFTER A GIVEN NUMBER, OR IN-BE

0001255009 SELECTS WHICH OF TWO (OR THREE) NUMERALS IS GREATER OR LESS THA

EF) NUMBERS TS GREATER (GREATEST) SMALLER (SMALLEST) FOR NUMBERS TO 100.

3 DIGIT NUMERALS AND THE SYMBOLS LESS THAN, =, AND GREATER THAN.

NUMERALS BY COMBINING SEVERAL SYMBOLS.

NE TO TEN BY POINTING TO OBJECT AND SAYING NUMBER.

N.

TH THE SPECIFIED ORDINAL POSITION TO TENTH.

ER AND NUMERAL OF STRUCTURED GROUPS TO 4.

ER AND NUMERAL OF STRUCTURED GROUPS 5-9.

N ORDER, READS THEM FROM LEFT TO RIGHT.

LEFT TO RIGHT ON AN ORDERED SET OF PICTURES.

RE OR AFTER A GIVEN NUMBER, OR IN-BETWEEN TWO NUMBERS. (1-9)

EF) NUMERALS TS GREATER OR LESS THAN ANOTHER. (1-9)

| | | |
|---|---|---|
| 0001255010 | IDENTIFIES THE ORDER OF SETS OF NUMBERS THROUGH 9 | RELATING TO CO |
| 0001255011 | STUDENT WILL NAME THE CARDINAL NUMBER OF ANY GIVEN SET | THROUGH 12. |
| 0001255012 | READ NUMBER WORDS THROUGH TEN. | |
| 0001255013 | GIVEN NUMBER WORDS FOR 0-10, MATCHES WORDS WITH NUMBERS. | |
| 0001255014 | GIVEN NUMBER WORDS FROM 0-10, MATCHES WORDS WITH | STRUCTURED GRO |
| 0001255015 | IDENTIFIES EVEN NUMBERS TO 50. (COUNTING 2,4,6,8,10, | ..., 50). |
| 0001255016 | WRITES EVEN NUMBERS TO 50. (COUNTING 2,4,6,8,10,..., | 50). |
| 0001255017 | IDENTIFIES NUMBERS TO 50 BY SKIP-COUNTING (2'S, 3'S, | 4'S, 5'S). |
| 0001255018 | WRITES ODD NUMBERS TO 50. (COUNTING 1,3,5,7,..., 49). | |
| 0001255019 | STUDENT COUNTS BY TWO'S THROUGH 20, BY 5'S TO 50, BY | 10'S TO 100. |
| 0001255020 | COUNTS ORALLY BY ONES TO 100 IN SHORT SEQUENCES. | |
| 0001255021 | WRITES NUMERAL FROM 1-100 IN SEQUENTIAL ORDER TO TOTAL | FOR SMALL BLOC |
| 0001255022 | WRITES NUMERAL 1-100 TO REPRESENT TOTAL OF AN ORDERED | SET OF PICTURE |
| 0001255023 | IDENTIFIES WHAT NUMBER COMES AFTER A GIVEN NUMBER, OR STRUCTURED GROUPS. | BEFORE ANY GIV |

NUMBERS THROUGH 9 RELATING TO CONCEPT OF ONE MORE.

UMBER OF ANY GIVEN SET THROUGH 12.

CHES WORDS WITH NUMBERS.

TCHES WORDS WITH STRUCTURED GROUPS.

(COUNTING 2,4,6,8,10, ..., 50).

NTING 2,4,6,8,10,..., 50).

-COUNTING (2'S, 3'S, 4'S, 5'S).

TING 1,3,5,7,..., 49).

20, BY 5'S TO 50, BY 10'S TO 100.

SHORT SEQUENCES.

UENTIAL ORDER TO TOTAL FOR SMALL BLOCKS OF (NUMBERED) OBJECTS.

T TOTAL OF AN ORDERED SET OF PICTURES FOR SMALL BLOCKS OF (NUMBERED) OBJECTS.

ER A GIVEN NUMBER, OR BEFORE ANY GIVEN NUMBER FOR NUMBERS TO 100, WITHIN

| | | |
|---|---|---|
| 0001255024 | PRESENTED WITH AN ORDERED ARRANGEMENT OF NUMERALS, | 0-100, |
| 0001255025 | IDENTIFIES NUMBER AFTER GIVEN NUMBER OR BEFORE GIVEN | NUMBER |
| 0001255026 | SELECTS A STRUCTURED GROUP TO MATCH A GIVEN NUMBER OR | NUMBERS |
| 0001255027 | STUDENT WRITES NUMBERS TO 150. | |
| 0001255028 | STUDENT WILL READ NUMERALS TO 150. | |
| 0001255029 | COUNTS ORALLY TO ONE THOUSAND BY 100'S, BY 10'S, 5'S, | AND 2'S. |

| | | |
|---|---|---|
| 0001260 | PATTERNS | |
| 0001260001 | COPY A GIVEN PATTERN OF OBJECTS OR SHAPES. | |
| 0001260002 | GIVEN A SERIES OF OBJECTS OR SHAPES IN A PATTERN, | DESCRIBE |
| 0001260003 | AFTER SEEING A GIVEN PATTERN OF OBJECTS THAT HAS NO PATTERN OF OBJECTS. | MORE THA |

| | | |
|---|---|---|
| 0001270 | PLACE VALUE | |
| 0001270001 | CONSTRUCTS SET THAT CONTAINS AS MANY OBJECTS AS A GIVEN | NUMBER. |
| 0001270002 | MATCHES TWO EQUIVALENT SETS OF OBJECTS IN A ONE-TO-ONE | RELATION |
| 0001270003 | IDENTIFIES TEN AS BEING ONE MORE THAN NINE. | |

ARRANGEMENT OF NUMERALS. 0-100, READS THEM ON REQUEST FROM ANY STARTING POINT.

VEN NUMBER OR BEFORE GIVEN NUMBER WITHOUT STRUCTURED GROUPS: TO 100.

TO MATCH A GIVEN NUMBER OR NUMBERS TO 99.

150.

TO 150.

AND BY 100'S, BY 10'S, 5'S, AND 2'S. STARTING WITH 100, 10, 5, AND 2 RESPECTIVELY.

JECTS OR SHAPES.

OR SHAPES IN A PATTERN, DESCRIBE THE NEXT STEP OF THE PATTERN.

RN OF OBJECTS THAT HAS NO MORE THAN FOUR PARTS, REPRODUCE FROM MEMORY THE SAME

NS AS MANY OBJECTS AS A GIVEN NUMBER.

S OF OBJECTS IN A ONE-TO-ONE RELATIONSHIP. MATCHES SETS TO TEN.

MORE THAN NINE.

0001270004 IDENTIFIES THE IDEA OF GROUPING BY TENS.

0001270005 STATES PLACE VALUE OF A PARTICULAR DIGIT.

0001270006 WRITES THE DIGIT WHICH IS IN THE TENS OR ONES PLACE AS REQUESTED FOR (

0001270007 WRITES THE NUMERAL WHICH NAMES A STRUCTURED GROUP OF UP TO 100 OBJECTS

0001270008 PLACES LESS THAN SYMBOL OR GREATER THAN SYMBOL TO INDICATE GREAT
100.

0001270009 GIVEN ANY NUMBER TO 150, THE STUDENT WILL IDENTIFY THE PLACE VALUE OF

0001270010 GIVEN THE PLACE VALUE OF THE DIGITS IN ANY NUMBER TO 150, THE STUDE

0001295 SETS

0001295001 RECOGNIZE A GROUP OF OBJECTS THAT HAVE SOMETHING IN COMMON.

0001295002 DISCRIMINATES SIMILARITIES AMONG OBJECTS.

0001295003 DISCRIMINATES DIFFERENCES AMONG OBJECTS.

0001295004 GIVEN A GROUP OF OBJECTS, RECOGNIZE THOSE THAT ARE THE SAME SIZE, THO
ARE THE SAME COLOR.

0001295005 GIVEN A GROUP OF OBJECTS WITH TWO OBJECTS DIFFERENT FROM THE REST, RECO

0001295006 SELECTS NON-EQUIVALENT SETS AND INDICATES WHICH HAS MORE OR LESS.

G BY TENS.

ULAR DIGIT.

HE TENS OR ONES PLACE AS REQUESTED FOR A GIVEN NUMBER.

A STRUCTURED GROUP OF UP TO 100 OBJECTS AS - TENS AND - ONES.

ATER THAN SYMBOL TO INDICATE GREATER OR LESSER WITHOUT STRUCTURED GROUPS: T

TUDENT WILL IDENTIFY THE PLACE VALUE OF EACH DIGIT.

IGITS IN ANY NUMBER TO 150, THE STUDENT WILL NAME THE NUMBER.

HAT HAVE SOMETHING IN COMMON.

NG OBJECTS.

G OBJECTS.

GNIZE THOSE THAT ARE THE SAME SIZE, THOSE THAT ARE THE SAME SHAPE, OR THOSE THAT

TWO OBJECTS DIFFERENT FROM THE REST, RECOGNIZE THE OBJECTS THAT ARE DIFFERENT.

D INDICATES WHICH HAS MORE OR LESS.

| | |
|---|---|
| 0001295007 | CONSTRUCTS NON-EQUIVALENT SETS AND INDICATES WHICH HAS MORE AND |
| 0001295008 | PLACES LESS THAN SYMBOL OR GREATER THAN SYMBOL BETWEEN 2 NUMBERS GROUPS: TO 9. |
| 0001295009 | PLACES GREATER THAN SYMBOL OR LESS THAN SYMBOL BETWEEN 2 NUMBERS STRUCTURED GROUPS: TO 100. |
| 0001295010 | SELECTS A SET THAT CONTAINS AS MANY OBJECTS AS A GIVEN NUMBER. |
| 0001295011 | COMPARES TWO NON-EQUIVALENT SETS AND INDICATES WHICH HAS MORE OR |
| 0001295012 | MATCHES TWO NONEQUIVALENT SETS AND INDICATES WHICH HAS MORE OR |
| 0001295013 | DETERMINE THAT 8 IS GREATER THAN 5 AND THAT 5 IS LESS THAN 8 BY THIS FOR ANY TWO NUMBERS LESS THAN 10. |
| 0001295014 | COUNT THE MEMBERS OF A SET CONTAINING ONE HUNDRED OR FEWER MEM |
| 0001295015 | COMPARE TWO NON-MATCHING SETS OF LESS THAN 100 OBJECTS TO DECIDE |
| 0001295016 | GIVEN EXAMPLES OF SETS, THE STUDENT IDENTIFIES EMPTY SET. |
| 0001295017 | USE 0 AS THE SYMBOL FOR THE NUMBER OF ELEMENTS IN THE EMPTY SET |
| 0001295018 | EXPRESS THE EMPTY SET. |
| 0001295019 | EXPRESS SUBSETS. |
| 0001295020 | IDENTIFY THE PROCESS OF ADDITION THROUGH EXPERIENCE WITH JOINING T |

TS AND INDICATES WHICH HAS MORE AND LESS.

REATER THAN SYMBOL BETWEEN 2 NUMBERS TO INDICATE GREATER OR LESSER WITH STRUCTURED

R LESS THAN SYMBOL BETWEEN 2 NUMBERS TO INDICATE THE GREATER OR LESSER WITH

AS MANY OBJECTS AS A GIVEN NUMBER.

SETS AND INDICATES WHICH HAS MORE OR LESS THROUGH VISUAL INSPECTION.

TS AND INDICATES WHICH HAS MORE OR LESS.

THAN 5 AND THAT 5 IS LESS THAN 8 BY COMPARING APPROPRIATE SETS OF OBJECTS AND DO
S THAN 10.

ONTAINING ONE HUNDRED OR FEWER MEMBERS.

S OF LESS THAN 100 OBJECTS TO DECIDE WHICH SET HAS FEWER (MORE) MEMBERS.

STUDENT IDENTIFIES EMPTY SET.

E NUMBER OF ELEMENTS IN THE EMPTY SET.

TION THROUGH EXPERIENCE WITH JOINING TWO SETS OF OBJECTS.

0001295021 IDENTIFIES THE PLUS SIGN (+) AS IT IS RELATED TO JOINING OF TWO DISJOI

0001295022 EXPRESS THE UNION OF SETS.

0001295023 ADD DISJOINT SETS.

0001295024 USING SETS, THE STUDENT WILL ILLUSTRATE THE COMMUTATIVE PROPERTY OF A

0001295025 IDENTIFY THE PROCESS OF SUBTRACTION THROUGH EXPERIENCE WITH SEPARATT

0001315 SUBTRACTION

0001315001 FILLS IN MISSING ADDENDS TO MAKE TRUE NUMBER SENTENCES FOR PICTURED

0001315002 FILLS IN NUMBERS (MISSING ADDENDS) TO MAKE TRUE NUMBER SENTENCES FOR

0001315003 IDENTIFIES THE INVERSE RELATION BETWEEN SUBTRACTION AND ADDITION (USI

0001315004 IDENTIFIES THE INVERSE RELATION BETWEEN SUBTRACTION AND ADDITION (USI

0001315005 IDENTIFIES THE ROLE OF ZERO IN SUBTRACTION PROBLEMS.

0001315006 IDENTIFIES THE MINUS SIGN (-) AS A SYMBOL MEANING TAKE AWAY.

0001315007 IDENTIFIES THE SOLUTION TO SUBTRACTION PROBLEMS AS BEING CALLED THE DI

0001315008 FILLS IN MISSING SUMS TO MAKE TRUE NUMBER SENTENCES FOR PICTURED SUBT

IT IS RELATED TO JOINING OF TWO DISJOINT SETS.

USTRATE THE COMMUTATIVE PROPERTY OF ADDITION.

TION THROUGH EXPERIENCE WITH SEPARATING A SUBSET FROM A SET OF OBJECTS.

TRUE NUMBER SENTENCES FOR PICTURED ADDITION SITUATIONS.

OS) TO MAKE TRUE NUMBER SENTENCES FOR PICTURED SUBTRACTION SITUATIONS.

BETWEEN SUBTRACTION AND ADDITION (USING NUMERALS THROUGH 5).

BETWEEN SUBTRACTION AND ADDITION (USING NUMERALS 6-9).

SUBTRACTION PROBLEMS.

S A SYMBOL MEANING TAKE AWAY.

ACTION PROBLEMS AS BEING CALLED THE DIFFERENCE.

UE NUMBER SENTENCES FOR PICTURED SUBTRACTION SITUATIONS.

0001315009 SOLVES SUBTRACTION EQUATIONS OF SETS NOT LARGER THAN 5, (FIRST H

0001315010 SOLVES SUBTRACTION EQUATIONS OF SETS 6-9.

0001315011 IDENTIFIES THE RELATIONSHIP IN FINDING A MISSING ADDEND AND FIND

0001315012 SOLVES SUBTRACTION EQUATION RELATED TO A SET OF 10. FIRST HO

0001315013 SOLVES SUBTRACTION EQUATIONS WITH DIFFERENCES TO 10. (FIRST H

0001315014 IDENTIFIES THE IDEA OF SUBTRACTING IN PARTS USING MORE THAN ONE

0001315015 SOLVES SUBTRACTION EQUATION OF SETS TO 19.

0001320 SUBTRACTION (WORD PROBLEMS)

0001320001 SOLVE WORD PROBLEMS INVOLVING SUBTRACTION OF TWO 2 DIGIT NUMERALS

0001325 VALUE OF COINS

0001325001 RECOGNIZES PENNY, ITS VALUE AND SYMBOL.

0001325002 USES CENTS SIGN.

0001325003 USES TERM CENT.

0001325004 RECOGNIZES NICKEL, DIME.

NS OF SETS NOT LARGER THAN 5, (FIRST HORIZONTAL, THEN VERTICAL).

NS OF SETS 6-9.

P IN FINDING A MISSING ADDEND AND FINDING A DIFFERENCE.

N RELATED TO A SET OF 10. FIRST HORIZONTAL; THEN VERTICAL.

NS WITH DIFFERENCES TO 10. (FIRST HORIZONTAL; THEN VERTICAL).

TRACTING IN PARTS USING MORE THAN ONE STEP.

N OF SETS TO 19.

)

ING SUBTRACTION OF TWO 2 DIGIT NUMERALS.

E AND SYMBOL.

0001325005 FINDS VALUE OF PENNIES AND NICKELS.

0001325006 RECOGNIZE THE COMPARATIVE VALUE OF COINS (PENNIES, NICKELS, DIMES).

0001325007 RECOGNIZES QUARTER.

0001325008 IDENTIFIES HALF DOLLAR AND DOLLAR.

0001325009 MATCHES COINS WITH NUMERICAL VALUES.

0001325010 ADD TO 50 CENTS.

0001325011 SELECT FROM A GROUP OF COINS A COMBINATION OF COINS THAT TOTALS 75 CENTS.

0001325012 USE COINS IN MAKING CHANGE (PENNIES, NICKELS, DIMES).

0001325013 UNDERSTAND THAT PRICE TAGS ARE RECORDED MEASUREMENTS OF MONEY.

0002005 ADDITION

0002005001 USES THE NUMBER LINE IN WORKING WITH ADDITION CONCEPT.

0002005002 RECOGNIZES AND USES THE SYMBOLS + AND =.

0002005003 FILLS IN NUMBERS (MISSING SUMS TO MAKE TRUE NUMBER SENTENCES

0002005004 RECOGNIZE ZERO AS THE IDENTITY ELEMENT FOR ADDITION IN THE SET OF

0002005005 WRITES THE NUMBER OF OBJECTS IN EACH OF TWO SETS AND THE NUMBER OF

0002005006 WRITES EQUATIONS RELATED TO A PARTICULAR SET (OR FAMILY) TO 10.

0002005007 RECOGNIZES THE COMMUTATIVE (ORDER) PRINCIPLE IN ADDITION.

0002005008 DISCOVER FROM THE ADDITION TABLE, NUMBER PATTERNS THROUGH TH

0002005009 CAN DEMONSTRATE THAT THE MATHEMATICAL OPERATION OF INTERSECTI

0002005010 BEGIN TO APPRECIATE USE OF TEN TO MAKE ADDITION EASY.

0002005011 USES PARENTHESES AND ASSOCIATIVE PRINCIPLE TO SHOW WHICH NUMBERS AR

0002005012 RECALL THE ADDITION FACTS THROUGH THE SUM OF 18.

0002005013 GIVEN ANY NUMBER TO 18, STUDENT WILL RE-NAME NUMBER IN ALL POSSIB

0002005014 ADD TWO 1 DIGIT NUMBERS VERTICALLY AND/OR HORIZONTALLY WHERE THE

KING WITH ADDITION CONCEPT.

BOLS + AND =.

UMS TO MAKE TRUE NUMBER SENTENCES.

ITY ELEMENT FOR ADDITION IN THE SET OF WHOLE NUMBERS.

S IN EACH OF TWO SETS AND THE NUMBER OF OBJECTS WHEN PUT TOGETHER. SUMS TO 10.

A PARTICULAR SET (OR FAMILY) TO 10.

(ORDER) PRINCIPLE IN ADDITION.

TABLE. NUMBER PATTERNS THROUGH THE SUM 18.

THEMATICAL OPERATION OF INTERSECTION IS RELATED TO ADDITION.

TEN TO MAKE ADDITION EASY.

ATIVE PRINCIPLE TO SHOW WHICH NUMBERS ARE ADDED FIRST.

HROUGH THE SUM OF 18.

DENT WILL RE-NAME NUMBER IN ALL POSSIBLE ADDITION COMBINATIONS.

TICALLY AND/OR HORIZONTALLY WHERE THE SUM IS NOT GREATER THAN 18.

0002005015 RECOGNIZES THAT TWO EVEN ADDENDS PRODUCE AN EVEN SUM.

0002005016 RECOGNIZES THAT TWO ODD ADDENDS PRODUCE AN EVEN SUM.

0002005017 FIND THE MISSING NUMBER IN AN ADDITION PROBLEM WHERE THE NUMERALS ARE L

0002005018 STUDENT USES THE HORIZONTAL AND VERTICAL ALGORISMS TO SOLVE PROBLEMS

0002005019 GIVEN ONE MEMBER OF A RELATED NUMBER FACT WITH SUMS TO 18, THE STUDEN

0002005020 USING SETS, STUDENT WILL ILLUSTRATE THE ASSOCIATIVE PROPERTY OF AD

0002005021 USES ASSOCIATIVE (GROUPING) PRINCIPLE FOR FINDING SUMS GREATER THAN 1

0002005022 THE STUDENT USES EXPANDED NOTATION TO ADD PAIRS OF TWO- DIGIT NUMERALS

0002005023 ADD THREE 2 DIGIT NUMERALS WITHOUT REGROUPING.

0002005024 FINDS SUMS OF THREE AND FOUR DIGIT NUMBERS WITHOUT REGROUPING.

0002005025 SOLVES COLUMN ADDITION PROBLEMS WITH THREE OR MORE ADDENDS WITH S

0002010 ADDITION (WORD PROBLEMS)

0002010001 READS AND TRANSFERS INFORMATION FROM A WORD PROBLEM TO THE SYMBOLS OF

0002010002 SOLVE WORD PROBLEMS FOR ADDITION PROBLEMS WHERE THE SUM IS NOT GREATER

PRODUCE AN EVEN SUM.

PRODUCE AN EVEN SUM.

DITION PROBLEM WHERE THE NUMERALS ARE LESS THAN 18.

VERTICAL ALGORISMS TO SOLVE PROBLEMS OF ADDITION WITH SUMS TO 18.

MBER FACT WITH SUMS TO 18, THE STUDENT NAMES THE OTHER THREE MEMBERS.

ATE THE ASSOCIATIVE PROPERTY OF ADDITION.

CIPLE FOR FINDING SUMS GREATER THAN 10.

ON TO ADD PAIRS OF TWO- DIGIT NUMERALS.

UT REGROUPING.

IT NUMBERS WITHOUT REGROUPING.

WITH THREE OR MORE ADDENDS WITH SUMS TO 18.

FROM A WORD PROBLEM TO THE SYMBOLS OF ARITHMETIC TO SOLVE THE PROBLEM.

PROBLEMS WHERE THE SUM IS NOT GREATER THAN 18.

0002030 DIVISION

0002030001 IDENTIFIES THE SYMBOL OF DIVISION.

0002030002 RECOGNIZES THAT DIVISION IS THE INVERSE OF MULTIPLIC

0002045 FRACTIONS

0002045001 USES CONCRETE AND SEMI-CONCRETE DEVICES TO DIVIDE AN OBJECT OR

0002045002 IDENTIFIES ONE HALF, ONE THIRD, ONE FOURTH, ONE FIFTH OF AN OBJ

0002045003 IDENTIFIES TWO THIRDS AND THREE FOURTHS OF A WHOLE OBJECT.

0002045004 USES CONCRETE AND SEMI-CONCRETE DEVICES TO DIVIDE A SET OF OBJECT

0002045005 IDENTIFIES ONE HALF, ONE THIRD, ONE FOURTH, ONE FIFTH SET OF OB

0002045006 IDENTIFIES TWO-THIRDS AND THREE-FOURTHS OF A WHOLE SET OF OBJECT

0002045007 RECOGNIZES THE NUMERALS OF ONE-HALF, ONE-THIRD, ONE- FOURTH, O

0002060 GEOMETRY (PLANE FIGURES) - CIRCLE -

0002060001 RECOGNIZES AND NAMES CIRCLE.

0002065 GEOMETRY (PLANE FIGURES) - CONGRUENCE -

VISION.

THE INVERSE OF MULTIPLICATION.

CRETE DEVICES TO DIVIDE AN OBJECT OR INTO HALVES, THIRDS, FOURTHS, FIFTHS.

HIRD, ONE FOURTH, ONE FIFTH OF AN OBJECT, IN VARIOUS WAYS.

THREE FOURTHS OF A WHOLE OBJECT.

CRETE DEVICES TO DIVIDE A SET OF OBJECTS INTO HALVES, THIRDS, FOURTHS, FIFTHS.

HIRD, ONE FOURTH, ONE FIFTH SET OF OBJECTS IN VARIOUS WAYS.

THREE-FOURTHS OF A WHOLE SET OF OBJECTS.

ONE-HALF, ONE-THIRD, ONE- FOURTH, ONE-FIFTH, TWO-THIRDS, THREE-FOURTHS.

CIRCLE -

.

CONGRUENCE -

0002065001 RECOGNIZE CONGRUENT SEGMENTS AS SEGMENTS HAVING THE SAME LENGTH.

0002065002 RECOGNIZE CONGRUENT, PLANE FIGURES AS FIGURES WHICH FIT ON ONE ANOTHER

0002070 GEOMETRY (PLANE FIGURES) - CONSTRUCTIONS -

0002070001 DRAW SIMPLE GEOMETRIC FIGURES.

0002080 GEOMETRY (PLANE FIGURES) - LINES -

0002080001 NAMES LINE SEGMENTS BY ENDPOINTS.

0002085 GEOMETRY (PLANE FIGURES) - OPEN/CLOSED FIGURES -

0002085001 READS DIRECTIONS WITH NAMES OF SIMPLE GEOMETRIC FIGURES.

0002085002 LABEL SIMPLE GEOMETRIC FIGURES.

0002085003 RECOGNIZES OPEN AND CLOSED FIGURES.

0002085004 INDICATES UNDERSTANDING OF TERM REGION BY SHADING REGIONS OF SIM

0002095 GEOMETRY (PLANE FIGURES) - QUADRILATERALS -

0002095001 RECOGNIZES AND NAMES RECTANGLE.

SEGMENTS HAVING THE SAME LENGTH.

ES AS FIGURES WHICH FIT ON ONE ANOTHER.

RUCTIONS -

-

.

CLOSED FIGURES -

IMPLE GEOMETRIC FIGURES.

ES.

REGION BY SHADING REGIONS OF SIMPLE CLOSED CURVES.

ILATERALS -

0002095002 RECOGNIZES AND NAMES SQUARE.

0002100 GEOMETRY (PLANE FIGURES) - SETS OF POINTS -

0002100001 LABEL POINTS IN LINE.

0002100002 RECOGNIZE A POINT AS A POSITION.

0002100003 IDENTIFIES CURVES, LINES, LINE SEGMENTS, CORNERS.

0002100004 RECOGNIZE A LINE SEGMENT OR CURVE AS A SET OF POINTS.

0002100005 RECOGNIZE A STRAIGHT LINE AS A SET OF POINTS WITH NO BEGINNING

0002100006 RECOGNIZE A SIMPLE CURVE (IN A PLANE) AS ONE THAT DOES NOT CROSS

0002100007 RECOGNIZE CLOSED SIMPLE CURVES.

0002100008 RECOGNIZE THE INSIDE AND OUTSIDE OF SIMPLE CLOSED CURVES.

0002125 GEOMETRY (PLANE FIGURES) - TRIANGLE -

0002125001 RECOGNIZES AND NAMES TRIANGLE.

0002135 GEOMETRY (SOLIDS)

SETS OF POINTS -

TION.

INF SEGMENTS, CORNERS.

CURVE AS A SET OF POINTS.

S A SET OF POINTS WITH NO BEGINNING AND NO END.

N A PLANE) AS ONE THAT DOES NOT CROSS ITSELF.

VES.

TSIDE OF SIMPLE CLOSED CURVES.

TRIANGLE -

LE.

0002135001 NAMES PICTURED REPRESENTATIONS OF SOLIDS - RECTANGLE, SQUARE, CIRCLE

0002135002 SELECTS CORRECT PICTURED REPRESENTATION WHEN NAME OF SOLID IS GIVEN

0002135003 DRAWS PICTURED REPRESENTATIONS OF SOLIDS WHEN NAME OF SOLID IS GIVEN

0002170 MEASUREMENT (DRY)

0002170001 USE STANDARD UNITS TO NEAREST WHOLE UNIT FOR WEIGHT (POUNDS).

0002175 MEASUREMENT (INSTRUMENTS)

0002175001 IDENTIFY PROPER INSTRUMENTS FOR MEASURING DIFFERENT OBJECTS.

0002180 MEASUREMENT (LINEAR)

0002180001 IDENTIFIES INCH, FOOT, YARD AS STANDARD U.S. MEASURE.

0002180002 USES STANDARD UNITS TO THE NEAREST WHOLE UNIT FOR LINEAR MEASURE

0002180003 REPRESENTS LENGTH OF ITEMS TO NEAREST INCH IN LINEAR MEASURES.

0002180004 MEASURES ITEMS USING THE INCH SCALES.

0002180005 MAKE A RULER WITH DIVISIONS SHOWING HALF UNITS.

F SOLIDS - RECTANGLE, SQUARE, CIRCLE, TRIANGLE.

NTATION WHEN NAME OF SOLID IS GIVEN.

F SOLIDS WHEN NAME OF SOLID IS GIVEN.

OLE UNIT FOR WEIGHT (POUNDS).

MEASURING DIFFERENT OBJECTS.

TANDARD U.S. MEASURE.

ST WHOLE UNIT FOR LINEAR MEASURE (INCHES AND FEET).

AREST INCH IN LINEAR MEASURES.

ALES.

ING HALF UNITS.

0002180006 MEASURES ITEMS USING THE CENTIMETER SCALES.

0002185 MEASUREMENT (LIQUID)

0002185001 IDENTIFIES CONTAINERS AS CUPS, PINTS, QUARTS, GALLONS.

0002185002 IDENTIFIES CONTAINERS' RELATION TO EACH OTHER.

0002185003 USE STANDARD UNITS TO NEAREST WHOLE UNIT FOR LIQUID MEASURE

0002185004 SOLVES SIMPLE WRITTEN PROBLEMS USING CUPS, PINTS, QUARTS, G

0002210 MEASUREMENT (TIME)

0002210001 RELATE CONCEPT OF TIME MEASUREMENT WITH SUCH UNITS AS YEAR, MON

0002210002 TELLS TIME TO THE HOUR AND HALF HOUR.

0002210003 TELL TIME TO THE NEAREST QUARTER HOUR.

0002220 MULTIPLICATION

0002220001 ADD EQUIVALENT SETS.

0002220002 FINDS PRODUCTS USING PRODUCT SETS (MANY TO MANY MATCHING)

NTIMETER SCALES.

PS, PINTS, QUARTS, GALLONS.

TION TO EACH OTHER.

ST WHOLE UNIT FOR LIQUID MEASURE (PINTS AND QUARTS).

EMS USING CUPS, PINTS, QUARTS, GALLONS.

UREMENT WITH SUCH UNITS AS YEAR, MONTH, WEEK, DAY, HOUR, MINUTE AND SECOND.

HALF HOUR.

ARTER HOUR.

T SETS (MANY TO MANY MATCHING).

0002220003 FINDS PRODUCTS USING REPEATED ADDITION.

0002220004 FINDS PRODUCTS USING NUMBER LINES.

0002220005 FINDS PRODUCTS USING EQUIVALENT SETS.

0002220006 FINDS PRODUCTS USING ARRAYS.

0002220007 IDENTIFIES THE SYMBOL X (TIMES).

0002220008 RECOGNIZES THE MULTIPLICATIVE PROPERTIES OF ZERO AND ONE.

0002220009 RECOGNIZE A MULTIPLICATION FACT THAT REPRESENTS A GIVEN REPEATED ADDIT

0002220010 USE THE MULTIPLICATION FACTS THROUGH THE PRODUCT 18.

0002220011 ONE FACTOR = 2, SECOND FACTOR NO GREATER THAN 14, STUDENT SOLVES
VERTICAL FORM.

0002220012 MULTIPLY 2 NUMERALS WHERE THE PRODUCT IS NOT GREATER THAN 25.

0002220013 USE ASSOCIATIVE PROPERTY OF MULTIPLICATION IN SET OF WHOLE NUMBERS.

0002220014 USES SET INTERPRETATION OF MULTIPLICATION FOR SOLVING WRITTEN PROBLE

0002225 NUMBER SENTENCES

0002225001 WRITE AN EQUATION FOR A PICTURED ADDITION PROBLEM WHERE THE SUM OF THE

DITION.

S.

SETS.

OPERTIES OF ZERO AND ONE.

THAT REPRESENTS A GIVEN REPEATED ADDITION FACT.

OUGH THE PRODUCT 18.

GREATER THAN 14. STUDENT SOLVES MULTIPLICATION PROBLEM, HORIZONTAL AND

ODUCT IS NOT GREATER THAN 25.

IPLICATION IN SET OF WHOLE NUMBERS. (4 X 3) X 2 = 4 X (3 X 2).

PLICATION FOR SOLVING WRITTEN PROBLEMS.

ADDITION PROBLEM WHERE THE SUM OF THE NUMERALS IS NOT GREATER THAN 18.

0002225002 WRITE AN EQUATION FOR A PICTURED SUBTRACTION PROBLEM WHERE THE

0002225003 GIVEN ADDITION PROBLEM WITH TWO ADDENDS AND THE SUM, WRITE AN SAME NUMERALS: TO 10.

0002225004 FIND SOLUTIONS FOR SENTENCES LIKE 3 + 2 = 8 - X, USING NUMBER LI

0002225005 USE THE TERMS GREATER THAN AND LESS THAN, AND EQUALS IN SENTEN

0002225006 PLACE THE CORRECT SYMBOL IN THE PLACEHOLDER IN SENTENCES LIKE 13 +

0002225007 USE SENTENCES LIKE 5 + X = 12, X + 6 = 8, 12 - X = 8, AND X - 5 SOLUTIONS FOR THE SENTENCES.

0002225008 FIND SOLUTIONS FOR SENTENCES LIKE 3 + 2 = 8 - X, X + 5 = 8 + 7, 8 WITH THE AID OF SETS OF OBJECTS.

0002225009 PLACES GREATER THAN, LESS THAN BETWEEN TWO NUMBERS TO INDICATE

0002225010 SELECTS WHICH OF TWO (OR THREE) NUMBERS IS GREATER (GREATEST

0002225011 WRITES GREATER THAN, LESS THAN TO SHOW INEQUALITIES OF FOUR-DIGI

0002225012 USE THE CORRECT SYMBOL (LESS THAN, = GREATER THAN), THAT BELONGS B HAS MORE THAN 3 DIGITS.

0002230 NUMBER SYSTEMS (EARLY)

0002230001 RECOGNIZES ROMAN NUMERALS AS ANOTHER SYSTEM OF NUMERATIO

0002230002 RELATES TO THE ROMAN CONCEPT OF NUMERATION. EX: VI MEANS 5 +

TURED SUBTRACTION PROBLEM WHERE THE MINUEND IS NOT GREATER THAN 18.

TWO ADDENDS AND THE SUM. WRITE AN EQUATION FOR A SUBTRACTION PROBLEM USING THE

S LIKE 3 + 2 = 8 = X, USING NUMBER LINE.

AND LESS THAN, AND EQUALS IN SENTENCES.

THE PLACEHOLDER IN SENTENCES LIKE 13 + 5 = 8 AND 15 + 3 = 5.

12, X + 6 = 8, 12 = X = 5, AND X = 5 = 6 TO REPRESENT PHYSICAL SITUATIONS AND FIND

S LIKE 3 + 2 = 8 = X, X + 5 = 8 + 7, 8 + X LESS THAN 12, AND 4 + 9 GREATER THAN X + 5,
CTS.

THAN BETWEEN TWO NUMBERS TO INDICATE THE GREATER OR LESSER NUMBER: TO 100.

REF) NUMBERS IS GREATER (GREATEST), SMALLER, (SMALLEST), FOR NUMBERS TO 100.

THAN TO SHOW INEQUALITIES OF FOUR-DIGIT NUMERALS.

S THAN, = GREATER THAN), THAT BELONGS BETWEEN TWO GIVEN NUMERALS, WHEN NEITHER NUMERAL

ANOTHER SYSTEM OF NUMERATION.

OF NUMERATION. EX: VI MEANS 5 + 1, IV MEANS 5 = 1.

0002230003 USES ROMAN NUMERALS TO XXXIX.

0002250 NUMBERS (WHOLE)

0002250001 RECOGNIZES THE SET OF WHOLE NUMBERS.

0002250002 IDENTIFIES THE SET OF EVEN NUMBERS.

0002250003 IDENTIFIES THE SET OF ODD NUMBERS.

0002250004 RECOGNIZE THAT THERE IS NO LARGEST WHOLE NUMBER.

0002255 NUMERALS

0002255001 READS NUMBER WORDS 0-10.

0002255002 SPELLS NUMBER WORDS 0-10.

0002255003 STUDENT READS THE NUMBER WORDS TO TWENTY.

0002255004 WRITE NUMBER WORDS TO TWENTY.

0002255005 STUDENT WILL NAME CARDINAL NUMBER OF ANY GIVEN SET TO 20.

0002255006 USE ORDINAL NUMBERS THROUGH TENTH.

0002255007 WRITE MANY SYMBOLS FOR THE SAME NUMBER; FOR EXAMPLE, 6 + 3, 5 + 5, 1

ERS.

RS.

S.

ST WHOLE NUMBER.

TWENTY.

R OF ANY GIVEN SET TO 20.

UMBER; FOR EXAMPLE, 6 + 3, 5 + 5, 17 - 8, AND 9 FOR NINE.

0002255008 COUNTS BY MULTIPLES OF 3, 4, 5, AND 10.

0002255009 READS SHORT SEQUENCES OF NUMBERS FROM ANY STARTING POINT TO 100.

0002255010 WRITES SHORT SEQUENCES OF NUMBERS FROM ANY STARTING POINT TO

0002255011 READS NUMERALS 0-100.

0002255012 WRITES NUMBERS 0-100.

0002255013 COMPLETE EXERCISES FOR COUNTING BY TENS AND FIVE FROM ANY START

0002255014 SUPPLIES THE NUMBER THAT COMES BEFORE, AFTER, OR BETWEEN ANY GIVEN

0002255015 ARRANGE GIVEN NUMBERS IN ORDER FROM THE LEAST TO THE GREATEST

0002255016 COUNT BY 5'S, 10'S, AND 100'S.

0002255017 LIST THE ODD NUMBERS FROM 1-99.

0002255018 LIST THE EVEN NUMBERS FROM 2-100.

0002255019 STUDENT WILL COUNT BY 2'S, 5'S, AND 10'S TO 200.

0002255020 COUNTS AND WRITES ORDERED SEQUENTIAL NUMERALS LESS THAN 1000.

0002255021 SKIP-COUNTS BY TENS, HUNDREDS, THOUSANDS FROM ANY GIVEN NUMERAL U

, 5, AND 10.

UMBERS FROM ANY STARTING POINT TO 100.

NUMBERS FROM ANY STARTING POINT TO 100.

NTING BY TENS AND FIVE FROM ANY STARTING POINT: TO 100.

OMES BEFORE, AFTER, OR BETWEEN ANY GIVEN NUMBERS TO 100.

RDER FROM THE LEAST TO THE GREATEST TO 100.

O'S.

-99.

2-100.

5'S, AND 10'S TO 200.

SEQUENTIAL NUMERALS LESS THAN 1000.

EDS, THOUSANDS FROM ANY GIVEN NUMERAL UP TO 9,999.

0002255022 READ ANY NUMERAL THROUGH 999.

0002255023 STUDENT WRITES NUMBERS TO 999.

0002260 PATTERNS

0002260001 RECOGNIZE RELATIONSHIP BETWEEN GEOMETRIC AND NUMERICAL PATTERNS.

0002270 PLACE VALUE

0002270001 RENAMES TEN ONE AS ONE TEN.

0002270002 REN/MES ONE GREATER THAN TEN AS TENS AND ONES.

0002270003 WRITES TWO-DIGIT NUMERALS IN EXPANDED NOTATION (ONES AND TENS).

0002270004 RENAMES ONE TEN AS TEN ONES, ADDS TEN ONES TO ONES AS GIVEN. EX.

0002270005 RECOGNIZE THE ONES, TENS, AND HUNDREDS PLACE IN A 3 DIGIT NUMERAL

0002270006 GIVEN THE PLACE VALUE OF THE DIGITS IN ANY NUMBER TO 999, STUDENT

0002270007 GIVEN ANY NUMBER TO 999, THE STUDENT WILL IDENTIFY THE PLACE VALUE O

0002270008 WRITE THREE-DIGIT NUMERALS IN EXPANDED NOTATION; FOR EXAMPLE, 765

0002270009 IDENTIFIES PLACE VALUE OF GIVEN NUMERALS AS ONES, TENS, HUNDREDS, AND
03 NUMBERS.

EOMETRIC AND NUMERICAL PATTERNS.

TENS AND ONES.

ANDED NOTATION (ONES AND TENS).

S TEN ONES TO ONES AS GIVEN. EX. 56 = 4 TENS, 16 ONES.

NDREDS PLACE IN A 3 DIGIT NUMERAL.

ITS IN ANY NUMBER TO 999, STUDENT WILL NAME THE NUMBER.

DENT WILL IDENTIFY THE PLACE VALUE OF EACH DIGIT.

PANDED NOTATION; FOR EXAMPLE, 765 = 700 + 60 + 5.

NUMERALS AS ONES, TENS, HUNDREDS, AND THOUSANDS (FOUR DIGIT NUMERALS) IN WORDS

0002270010 PLACES THE NUMBER THAT COMES BEFORE, AFTER, OR BETWEEN ANY GIVEN

0002270011 WRITES FOUR DIGIT NUMERALS IN EXPANDED NOTATION.

0002295 SETS

0002295001 IDENTIFIES EQUIVALENT SETS 0-10.

0002295002 IDENTIFIES NON-EQUIVALENT SETS 0-10.

0002295003 ADD EQUIVALENT SETS.

0002295004 IDENTIFY THE PROCESS OF MULTIPLICATION THROUGH EXPERIENC
OBJECTS.

0002315 SUBTRACTION

0002315001 FILLS IN ADDENDS TO MAKE TRUE NUMBER SENTENCES.

0002315002 COMPLETES EXERCISES ON INVERSE RELATION BETWEEN ADDITION AND SUBTR

0002315003 FINDS DIFFERENCES USING THE NUMBER LINE.

0002315004 USES NUMBER LINE TO FIND MISSING ADDENDS.

0002315005 RECOGNIZE THAT SUBTRACTION IS NOT COMMUTATIVE.

0002315006 SUBTRACT A 1 DIGIT NUMERAL FROM A LARGER 1 DIGIT NUMERAL VERTICALL

REFORE, AFTER, OR BETWEEN ANY GIVEN THREE OR FOUR DIGIT NUMERALS.

N EXPANDED NOTATION.

-10.

TS 0-10.

IPLICATION THROUGH EXPERIENCE WITH JOINING SEVERAL EQUIVALENT SETS OF

UE NUMBER SENTENCES.

RSE RELATION BETWEEN ADDITION AND SUBTRACTION TO 10.

NUMBER LINE.

SSING ADDENDS.

IS NOT COMMUTATIVE.

ROM A LARGER 1 DIGIT NUMERAL VERTICALLY AND/OR HORIZONTALLY.

| | | |
|---|---|---|
| 0002315007 | RECOGNIZE ZERO AS THE IDENTITY ELEMENT FOR SUBTRACTION | IN THE SET OF |
| 0002315008 | SOLVES TWO DIGIT SUBTRACTION EQUATIONS WITHOUT | REGROUPING. |
| 0002315009 | IDENTIFIES THE INVERSE RELATIONSHIP OF SUBTRACTION AND | ADDITION IN US |
| 0002315010 | RECOGNIZES AND USES SYMBOLS (=) AND (≠). | |
| 0002315011 | SOLVES SUBTRACTION EQUATIONS FROM SETS, 0-9. | |
| 0002315012 | RECOGNIZES INVERSE RELATIONSHIP OF ADDITION AND | SUBTRACTION TH |
| 0002315013 | USES HORIZONTAL AND VERTICAL PATTERNS FOR SUBTRACTION. | |
| 0002315014 | FIND THE MISSING NUMBER IN A SUBTRACTION PROBLEM WHERE | THE NUMERALS A |
| 0002315015 | RECALL THE SUBTRACTION FACTS THROUGH SUM OF 18. | |
| 0002315016 | SUBTRACT NUMERALS WHERE THE MINUEND IS NOT GREATER THAN | 18. |
| 0002315017 | RECOGNIZES THE INEQUALITIES IN PREPARATION FOR | SUBTRACTING WI |
| 0002315018 | BEGIN TO APPRECIATE USE OF TEN TO MAKE SUBTRACTION EASY. | |
| 0002315019 | REGROUPS TENS IN TWO DIGIT NUMBERS FOR SUBTRACTION. | |
| 0002315020 | SUBTRACT 2 DIGIT NUMERALS WITHOUT REGROUPING. | |

LEMENT FOR SUBTRACTION IN THE SET OF WHOLE NUMBERS.

ATIONS WITHOUT REGROUPING.

HIP OF SUBTRACTION AND ADDITION IN USING 0-9.

AND (=).

M SETS, 0-9.

OF ADDITION AND SUBTRACTION THROUGH 18.

TERNS FOR SUBTRACTION.

TRACTION PROBLEM WHERE THE NUMERALS ARE LESS THAN 18.

OUGH SUM OF 18.

END IS NOT GREATER THAN 18.

REPARATION FOR SUBTRACTING WITH REGROUPING.

O MAKE SUBTRACTION EASY.

RS FOR SUBTRACTION.

T REGROUPING.

0002315021 SUBTRACT 2 DIGIT NUMERALS WITH REGROUPING.

0002315022 SOLVES SUBTRACTION EQUATIONS INVOLVING THREE AND FOUR DIGIT NUME

0002320 SUBTRACTION (WORD PROBLEMS)

0002320001 SOLVE WORD PROBLEMS FOR SUBTRACTION WHERE THE MINUEND IS NOT GRE

0002325 VALUE OF COINS

0002325001 IDENTIFIES THE COINS, PENNY, NICKEL, DIME, QUARTER, HALF DOLLA

0002325002 MAKE CHANGE CORRECTLY FOR QUANTITIES UP TO 25 CENTS.

0002325003 GIVES CHANGE IN SMALLEST NUMBER OF COINS FOR VALUES TO 75 CENTS.

0002325004 SOLVES ADDITION AND SUBTRACTION MONEY PROBLEMS, AMOUNTS LESS THAN

0002325005 GIVES VALUE OF COIN COLLECTIONS INVOLVING ALL U.S. COINS BY COUNTIN

0002325006 SELECTS COINS EQUAL IN VALUE TO SUMS TO $1.00 OUT OF A SET OF MIX

TH REGROUPING.

INVOLVING THREE AND FOUR DIGIT NUMERALS; NO REGROUPING.

RACTION WHERE THE MINUEND IS NOT GREATER THAN 18.

NICKEL, DIME, QUARTER, HALF DOLLAR.

ANTITIES UP TO 25 CENTS.

BER OF COINS FOR VALUES TO 75 CENTS.

TION MONEY PROBLEMS, AMOUNTS LESS THAN $1.00.

IONS INVOLVING ALL U.S. COINS BY COUNTING TO $1.00.

TO SUMS TO $1.00 OUT OF A SET OF MIXED COINS.

| | |
|---|---|
| 0003005 | ADDITION |
| 0003005001 | DISCOVER NUMBER PATTERNS FROM THE ADDITION TABLES. |
| 0003005002 | GIVEN ANY NUMBER SENTENCE, STUDENT IDENTIFIES THE REMAINING MEMB |
| 0003005003 | USES COMMUTATIVE PRINCIPLE OF ADDITION. |
| 0003005004 | USES ZERO (IDENTITY) AND ONE PRINCIPLE OF ADDITION. |
| 0003005005 | GIVEN THE SUM AND ONE ADDEND IN AN ADDITION PROBLEM, FIND THE MISSI |
| 0003005006 | WRITES ADDITION, EQUATIONS WITH ADDENDS AND USES VARYING NUMBERS OF DIG |
| 0003005007 | WRITES RELATED ADDITION EQUATIONS FOR GIVEN SETS, NUMBER LINES. |
| 0003005008 | FINDS SUMS COLUMN ADDITION, NO REGROUPING ONE OR TWO DIGIT NUMBERS, |
| 0003005009 | STUDENT USES THE VERTICAL ALGORISM TO SOLVE ADDITION PROBLEMS OF TH |
| 0003005010 | ADD TWO 2 DIGIT NUMERALS BY USING EXPANDED NOTATION. |
| 0003005011 | USES ASSOCIATIVE PRINCIPLE OF ADDITION TO ADD TWO OR MORE DIGIT NUM |
| 0003005012 | DEMONSTRATE UNDERSTANDING OF GROUPING AND REGROUPING BY COMPLETING SEN<br>3 HUNDREDS + X TENS + 4 ONES BY MEANS OF TALLY BOXES OR OTHER DEVICES. |
| 0003005013 | ADD THREE 2 DIGIT NUMERALS WITHOUT REGROUPING. |
| 0003005014 | ADDS, WITH REGROUPING, THREE DIGIT NUMERALS, TWO ADDENDS. |

HE ADDITION TABLES.

ENT IDENTIFIES THE REMAINING MEMBERS OF THE ADDITION FAMILY.

DDITION.

INCIPLE OF ADDITION.

AN ADDITION PROBLEM, FIND THE MISSING ADDEND, USING INVERSE OPERATION.

ADDENDS AND USES VARYING NUMBERS OF DIGITS IN VERTICAL FORM.

NS FOR GIVEN SETS, NUMBER LINES.

REGROUPING ONE OR TWO DIGIT NUMBERS, MULTIPLE ADDENDS.

ISM TO SOLVE ADDITION PROBLEMS OF THREE AND FOUR DIGIT NUMERALS.

NG EXPANDED NOTATION.

DDITION TO ADD TWO OR MORE DIGIT NUMERALS.

DUPING AND REGROUPING BY MEANS OF TALLY BOXES OR COMPLETING SENTENCES SUCH AS 458 = X + 50 + 8 AND 394 = OTHER DEVICES.

OUT REGROUPING.

GIT NUMERALS, TWO ADDENDS.

| | | |
|---|---|---|
| 0003010 | ADDITION (WORD PROBLEMS) | |
| 0003010001 | SOLVE TO THE NEAREST MINUTE, 1 STEP ADDITION STORY | PROBLEMS |
| 0003010002 | WRITE AND SOLVE EQUATIONS FOR STORY PROBLEMS REQUIRING | ADDITION |
| 0003010003 | SOLVE WORD PROBLEMS FOR ADDITION OF 2 NUMERALS WITH NO | MORE THAN |
| 0003030 | DIVISION | |
| 0003030001 | FINDS MISSING FACTORS FOR BASIC FACTS. | |
| 0003030002 | DIVIDE GIVEN SET OF NO MORE THAN 20 ELEMENTS INTO | GROUPS OF |
| 0003030003 | WRITES DIVISION EQUATIONS FOR GIVEN NUMBER LINES. | |
| 0003030004 | WRITE DIVISION EQUATIONS FOR GIVEN SETS. | |
| 0003030005 | USES REPEATED SUBTRACTION TO SOLVE BASIC DIVISION | EQUATIONS |
| 0003030006 | FIND THE QUOTIENT OF A DIVISION PROBLEM WITH A 2 DIGIT SUBTRACTION. | DIVIDEND |
| 0003030007 | RECOGNIZES DIVISION AS THE INVERSE OF MULTIPLICATION. | |
| 0003030008 | USES THE ONE PRINCIPLE FOR DIVISION. | |
| 0003030009 | RECOGNIZES 0 IS NEVER A DIVISOR. | |
| 0003030010 | USING REPEATED SUBTRACTION WITH MULTIPLES OF THE THROUGH 25. | DIVISOR, |

E, 1 STEP ADDITION STORY PROBLEMS INVOLVING TIME.

FOR STORY PROBLEMS REQUIRING ADDITION OF 1 OR 2 DIGIT NUMBERS.

DITION OF 2 NUMERALS WITH NO MORE THAN 4 DIGITS.

BASIC FACTS.

THAN 20 ELEMENTS INTO GROUPS OF EQUIVALENT SETS.

FOR GIVEN NUMBER LINES.

R GIVEN SETS.

O SOLVE BASIC DIVISION EQUATIONS.

ISION PROBLEM WITH A 2 DIGIT DIVIDEND AND A 1 DIGIT DIVISOR USING REPEATED

INVERSE OF MULTIPLICATION.

DIVISION.

ISOR.

WITH MULTIPLES OF THE DIVISOR, THE STUDENT WILL SOLVE PROBLEMS WITH DIVIDENDS

| | | |
|---|---|---|
| 0003030011 | USE THE DIVISION FACTS THROUGH 45. | |
| 0003030012 | FINDS MISSING QUOTIENTS FOR DIVISION EQUATIONS THROUGH | 81 DIVIDED BY |
| 0003030013 | FINDS TWO AND THREE DIGIT QUOTIENTS THAT ARE MULTIPLES | OF 10 AND 100 |
| 0003030014 | SOLVES DIVISION EQUATIONS WITHOUT REMAINDERS, USING QUOTIENTS. | STANDARD ALGOR |
| 0003030015 | DIVIDE A 3 DIGIT NUMERAL BY A 1 DIGIT NUMERAL (NO | REMAINDER). |
| 0003030016 | FIND THE QUOTIENT AND REMAINDER FOR DIVISION PROBLEM | WITH A 2 OR 3 |
| 0003030017 | SOLVES DIVISION EQUATIONS WITH REMAINDERS, USING QUOTIENTS. | STANDARD ALGOR |
| 0003035 | ESTIMATION | |
| 0003035001 | ESTIMATE THE SUM OF TWO NUMBERS. FOR EXAMPLE, 287 + 520 | IS APPROXIMATE |
| 0003035002 | STUDENT ROUNDS NUMBERS TO TENS AND HUNDREDS IN | ESTIMATING DIF |
| 0003045 | FRACTIONS | |
| 0003045001 | RESPONDS TO NAMES OF COMMON FRACTIONS. | |
| 0003045002 | USES COMMON FRACTIONS IN DIVIDING OBJECTS. | |
| 0003045003 | USES COMMON FRACTIONS IN DIVIDING SETS. | |

ION EQUATIONS THROUGH 81 DIVIDED BY 9.

TS THAT ARE MULTIPLES OF 10 AND 100; ONE DIGIT DIVISORS.

REMAINDERS, USING STANDARD ALGORITHM. ONE DIGIT DIVISORS, TWO DIGIT

IGIT NUMERAL (NO REMAINDER).

OR DIVISION PROBLEM WITH A 2 OR 3 DIGIT NUMBER BY A 1 DIGIT NUMBER.

MAINDERS, USING STANDARD ALGORITHM. ONE DIGIT DIVISORS, TWO DIGIT

FOR EXAMPLE, 287 + 520 IS APPROXIMATELY 300 + 500 OR 800.

D HUNDREDS IN ESTIMATING DIFFERENCES.

IONS.

OBJECTS.

SETS.

| | | |
|---|---|---|
| 0003045004 | IDENTIFY TWO-THIRDS AND THREE-FOURTHS OF A WHOLE. | |
| 0003045005 | STUDENT IDENTIFIES FIFTHS, SIXTHS, AND EIGHTHS OF SETS | OF OBJECT |
| 0003045006 | RELATE THE PROPER FRACTION (HALVES, THIRDS, FOURTHS, GIVEN SET OR FIGURE. | FIFTHS, S |
| 0003045007 | STUDENT IDENTIFIES RATIONAL NUMBERS FOR INDICATING | FIFTHS, S |
| 0003045008 | STUDENT WRITES RATIONAL NUMBERS FOR INDICATING FIFTHS, | SIXTHS, A |
| 0003045009 | GIVEN THE FRACTION ONE-HALF, ONE-THIRD, ONE-FOURTH, ONE- SUPPLY A MINIMUM OF TWO EQUIVALENT FRACTIONS FOR EACH. | FIFTH, ON |
| 0003045010 | IDENTIFIES FRACTIONS RELATED TO ORDERED PAIRS OF FOURTHS, FIFTHS, SIXTHS, EIGHTHS), WITH ONE AS THE | NUMBERS, F NUMERATOR |
| 0003045011 | IDENTIFIES EQUIVALENT FRACTIONS USING VISUAL AIDS. | |
| 0003045012 | SHOW TWO-FOURTHS = ONE-HALF, ETC., BY THE USE OF | PHYSICAL |
| 0003045013 | SHOW TWO-FOURTHS = ONE-HALF, ETC., BY USE OF PICTURES. | |
| 0003045014 | RECOGNIZE GREATER THAN OR LESS THAN FOR THE FRACTIONS (NOTE THAT FRACTIONS IS BEING USED HERE FOR RATIONAL | ONE-FOURTH NUMBERS). |
| 0003045015 | ADD LIKE FRACTIONS WITH DENOMINATORS OF 2,3,4,5,6, OR 8 FRACTIONS. | WHERE BOTH |
| 0003045016 | SOLVES WORD PROBLEMS INVOLVING FRACTIONS. | |

REE-FOURTHS OF A WHOLE.

SIXTHS, AND EIGHTHS OF SETS OF OBJECTS.

(HALVES, THIRDS, FOURTHS, FIFTHS, SIXTHS, OR EIGHTHS) TO THE SHADED REGION OF A

L NUMBERS FOR INDICATING FIFTHS, SIXTHS, AND EIGHTHS.

MBERS FOR INDICATING FIFTHS, SIXTHS, AND EIGHTHS.

F, ONE-THIRD, ONE-FOURTH, ONE- FIFTH, ONE-SIXTH, AND/OR ONE-EIGHTH, THE STUDENT WILL
UIVALENT FRACTIONS FOR EACH.

ED TO ORDERED PAIRS OF NUMBERS, PARTS OF REGIONS AND SETS (HALVES, THIRDS,
IGHTHS), WITH ONE AS THE NUMERATOR AND WITH NUMERATOR GREATER THAN ONE.

TIONS USING VISUAL AIDS.

F, ETC., BY THE USE OF PHYSICAL OBJECTS.

F, ETC., BY USE OF PICTURES.

LESS THAN FOR THE FRACTIONS ONE-FOURTH, ONE-THIRD, ONE-HALF WITH PHYSICAL OBJECTS.
ING USED HERE FOR RATIONAL NUMBERS).

NOMINATORS OF 2,3,4,5,6, OR 8 WHERE BOTH OF THE ADDENDS AND THE SUM ARE PROPER

VING FRACTIONS.

0003050 GEOMETRY (COORDINATE SYSTEMS)

0003050001 RECOGNIZE THAT A POINT ON A LINE CAN BE DESCRIBED BY A NUMBER (COORDI

0003050002 USES COORDINATES (NUMBER PAIRS) TO DETERMINE LOCATIONS ON A PLANE.

0003050003 GRAPHS GIVEN POINTS IN A PLANE.

0003055 GEOMETRY (PLANE FIGURES) - ANGLES -

0003055001 IDENTIFIES A RIGHT ANGLE.

0003055002 NAMES A RIGHT ANGLE BY THREE POINTS.

0003060 GEOMETRY (PLANE FIGURES) - CIRCLE -

0003060001 DRAWS CIRCLE WITHOUT COMPASS.

0003065 GEOMETRY (PLANE FIGURES) - CONGRUENCE -

0003065001 RECOGNIZE CONGRUENT ANGLES.

0003065002 RECOGNIZE THAT A RECTANGULAR SHEET OF PAPER CAN BE DIVIDED INTO T
FOLDING.

0003070 GEOMETRY (PLANE FIGURES) - CONSTRUCTIONS -

0003070001 FINDS A MID-POINT.

CAN BE DESCRIBED BY A NUMBER (COORDINATE).

TO DETERMINE LOCATIONS ON A PLANE.

S -

NTS.

E -

UENCE -

ET OF PAPER CAN BE DIVIDED INTO TWO OR MORE CONGRUENT PARTS THROUGH

RUCTIONS -

0003070002 CONSTRUCTS A RIGHT ANGLE IN A CIRCLE.

0003080 GEOMETRY (PLANE FIGURES) - LINES -

0003080001 IDENTIFIES PARALLEL LINES.

0003085 GEOMETRY (PLANE FIGURES) - OPEN/CLOSED FIGURES -

0003085001 DESCRIBE A GIVEN GEOMETRIC FIGURE AS BEING OPEN OR CLOSED.

0003085002 RECOGNIZE OBJECTS OR DRAWINGS THAT ARE TRIANGLES, QUADRILA

0003090 GEOMETRY (PLANE FIGURES) - POLYGONS -

0003090001 IDENTIFIES PLANE GEOMETRIC FIGURES - TRAPEZOID, PENTAGON,

0003090002 ASSOCIATES THE NUMBER OF SIDES OF A POLYGON WITH THE NUMBER OF

0003090003 FINDS THE SUM OF THE ANGLES OF A TRIANGLE AND A QUADRILA

0003090004 USES BASIC FIGURES OF GEOMETRY TO CONSTRUCT ANGLES, TRIANGLES

0003095 GEOMETRY (PLANE FIGURES) - QUADRILATERALS -

0003095001 FIND THE PERIMETER OF A RECTANGLE OR PARALLELOGRAM.

N A CIRCLE.

LINES -

OPEN/CLOSED FIGURES -
FIGURE AS BEING OPEN OR CLOSED.

NGS THAT ARE TRIANGLES, QUADRILATERALS, AND CIRCLES.

POLYGONS -
FIGURES - TRAPEZOID, PENTAGON, AND OTHER REGULAR POLYGONS.

IDES OF A POLYGON WITH THE NUMBER OF DIAGONALS.

S OF A TRIANGLE AND A QUADRILATERAL USING VISUAL AIDS.

ETRY TO CONSTRUCT ANGLES, TRIANGLES, QUADRILATERALS, PARALLELOGRAMS,

QUADRILATERALS -
TANGLE OR PARALLELOGRAM.

0003095002 RECOGNIZES THAT BY JOINING MID-POINTS OF A QUADRILATERAL (WITHOUT CROSS

0003095003 GIVEN A PARALLELOGRAM MARKED OFF IN SQUARES, THE STUDENT WILL DETERMINE

0003100 GEOMETRY (PLANE FIGURES) - SETS OF POINTS -

0003100001 LOCATES GIVEN POINTS IN A PLANE.

0003100002 RECOGNIZE THAT MANY LINES MAY PASS THROUGH A POINT.

0003100003 RECOGNIZE THAT THERE IS ONLY ONE LINE THROUGH TWO POINTS.

0003100004 RECOGNIZE THAT TWO LINES CAN INTERSECT AT ONLY ONE POINT.

0003100005 RECOGNIZE RAYS AND ANGLES.

0003105 GEOMETRY (PLANE FIGURES) - SIMILARITY -

0003105001 RECOGNIZE THAT FIGURES ARE SIMILAR IF THEY HAVE THE SAME SHAPE. FOR EX

0003115 GEOMETRY (PLANE FIGURES) - SYMMETRY -

0003115001 RECOGNIZE SYMMETRY WITH RESPECT TO A LINE BY FOLDING PAPER CONTAINI
VERTICAL AXES OF SYMMETRY.

INTS OF A QUADRILATERAL (WITHOUT CROSSING LINES) A PARALLELOGRAM IS FORMED.

IN SQUARES, THE STUDENT WILL DETERMINE THE NUMBER OF SQUARE UNITS.

F POINTS -

S THROUGH A POINT.

LINE THROUGH TWO POINTS.

RSECT AT ONLY ONE POINT.

RITY -

R IF THEY HAVE THE SAME SHAPE. FOR EXAMPLE, ALL SQUARES ARE SIMILAR.

RY -

O A LINE BY FOLDING PAPER CONTAINING SYMMETRICAL FIGURES ALONG THEIR

| | | |
|---|---|---|
| 0003140 | GEOMETRY (SPACE RELATIONSHIPS) | |
| 0003140001 | RECOGNIZES INTERIOR AND EXTERIOR OF GEOMETRIC FIGURES - | ANGLES, TR |
| 0003140002 | DESCRIBE A GIVEN POINT AS BEING INSIDE, ON, OR OUTSIDE | A FIGURE. |
| 0003145 | GRAPHS | |
| 0003145001 | EXPLAIN SPECIFIC DATA PRESENTED IN A BAR OR PICTURE | GRAPH. |
| 0003145002 | CONSTRUCT A PICTURE GRAPH FROM GIVEN DATA. | |
| 0003180 | MEASUREMENT (LINEAR) | |
| 0003180001 | USES THE TERM SEGMENT, SQUARE, CUBIC TO DISTINGUISH | GIVEN MEAS |
| 0003180002 | MEASURES LENGTH TO THE NEAREST HALF INCH. | |
| 0003180003 | USING A RULER, MEASURE OBJECTS TO THE NEAREST QUARTER | INCH. |
| 0003180004 | USES ARBITRARY STANDARD (ENGLISH) UNITS TO MEASURE | LENGTH, AR |
| 0003180005 | USES METRIC UNITS TO MEASURE LENGTH, AREA, VOLUME. | |
| 0003180006 | MAKES COMPARISONS OF METRIC AND STANDARD (ENGLISH) | MEASURES. |
| 0003180007 | GIVEN A SCALE, MEASURE DISTANCES ON A MAP. | |

ERIOR OF GEOMETRIC FIGURES - ANGLES, TRIANGLE, QUADRILATERALS, CIRCLES.

EING INSIDE, ON, OR OUTSIDE A FIGURE.

NTED IN A BAR OR PICTURE GRAPH.

ROM GIVEN DATA.

RE, CUBIC TO DISTINGUISH GIVEN MEASURES.

EST HALF INCH.

CTS TO THE NEAREST QUARTER INCH.

GLISH) UNITS TO MEASURE LENGTH, AREA, VOLUME.

E LENGTH, AREA, VOLUME.

AND STANDARD (ENGLISH) MEASURES.

ANCES ON A MAP.

0003185 MEASUREMENT (LIQUID)

0003185001 MEASURES CAPACITY IN OUNCES, CUPS, PINTS, QUARTS, GALLONS.

0003185002 USE STANDARD UNITS OF MEASURE, SUCH AS CUPS, GALLONS, OUNCES, IN DE

0003205 MEASUREMENT (TEMPERATURE)

0003205001 READS TEMPERATURES USING FAHRENHEIT THERMOMETER.

0003205002 RECORDS TEMPERATURES USING FAHRENHEIT THERMOMETER.

0003205003 FIND THE DIFFERENCE BETWEEN TWO GIVEN TEMPERATURES.

0003210 MEASUREMENT (TIME)

0003210001 IDENTIFIES CALENDAR UNITS, NUMBER OF DAYS IN A WEEK, EACH MONTH.

0003210002 COMPLETES CALENDARS.

0003210003 WRITES DATE IN WORDS.

0003210004 WRITES GIVEN DATE IN NUMERALS.

0003210005 USES VISUAL AIDS IN TIME UNITS.

0003210006 USES MORNING, AFTERNOON, NIGHT, DIVIDING DAY AT NOON AND MIDNIGHT.

0003210007 USES A.M. OR P.M. IN WRITING TIME.

S, PINTS, QUARTS, GALLONS.

UCH AS CUPS, GALLONS, OUNCES, IN DETERMING WEIGHT.

EIT THERMOMETER.

NHEIT THERMOMETER.

GIVEN TEMPERATURES.

R OF DAYS IN A WEEK, EACH MONTH.

DIVIDING DAY AT NOON AND MIDNIGHT.

I.

0003210008 READS ANY TIME ON CLOCK FACE.

0003210009 SHOWS ANY TIME USING CLOCK FACE.

0003210010 SOLVES WRITTEN PROBLEMS INVOLVING TIME UNITS.

0003220 MULTIPLICATION

0003220001 MULTIPLY THROUGH SKIP COUNTING TO INTRODUCE AN ELEMENT OF LOGIC

0003220002 MULTIPLY THROUGH NUMBER LINES, TO INTRODUCE AN ELEMENT OF LOGIC

0003220003 USES REPEATED ADDITION TO SOLVE MULTIPLICATION PROBLEMS. ONE DIGI

0003220004 USE THE NUMBER LINE TO ILLUSTRATE MULTIPLICATION PROBLEMS.

0003220005 THE STUDENT WILL NAME MULTIPLICATION FACTS THROUGH FIVE.

0003220006 USE THE MULTIPLICATION FACTS WITH PRODUCTS THROUGH 45.

0003220007 DISCOVER NUMBER PATTERNS FROM MULTIPLICATION TABLES.

0003220008 TELL THE MULTIPLICATION FACTS OF 1 DIGIT FACTORS WHERE AT LEAST

0003220009 TELL THE MULTIPLICATION FACTS OF 1 DIGIT NUMBERS.

0003220010 FINDS UNKNOWN FACTS FROM KNOWN FACTS.

.

ACE.

LVING TIME UNITS.

NG TO INTRODUCE AN ELEMENT OF LOGIC IN FINDING PRODUCTS.

S. TO INTRODUCE AN ELEMENT OF LOGIC IN FINDING PRODUCTS.

LVE MULTIPLICATION PROBLEMS. ONE DIGIT FACTORS.

TRATE MULTIPLICATION PROBLEMS.

LICATION FACTS THROUGH FIVE.

WITH PRODUCTS THROUGH 45.

M MULTIPLICATION TABLES.

S OF 1 DIGIT FACTORS WHERE AT LEAST ONE OF THE FACTORS IS LESS THAN 6.

S OF 1 DIGIT NUMBERS.

WN FACTS.

0003220011 USES MULTIPLICATION ALGORITHM TO FIND A ONE DIGIT FACTOR TIMES

0003220012 USES ZERO (IDENTITY) AND ONE PRINCIPLE FOR MULTIPLICATIO

0003220013 USES THE COMMUTATIVE PRINCIPLE FOR MULTIPLICATION.

0003220014 USES THE ASSOCIATIVE PRINCIPLE FOR MULTIPLICATION.

0003220015 WRITES MULTIPLICATION EQUATIONS FOR GIVEN SETS, NUMBER LINES, PAIRS.

0003220016 MULTIPLY A 2 DIGIT OR 3 DIGIT NUMERAL BY A 1 DIGIT NUMERAL WHERE

0003220017 SOLVE WORD PROBLEMS USING MULTIPLICATION WHERE THE PRODUCT IS NO

0003220018 MULTIPLY A 2 OR 3 DIGIT NUMERAL BY A 1 DIGIT NUMERAL WHERE REGROUP

0003220019 MULTIPLIES A ONE DIGIT FACTOR TIMES THREE AND FOUR DIGIT FACTORS.

0003220020 MULTIPLY MENTALLY BY 10 AND 100.

0003220021 FINDS PRODUCTS USING 10 AND 100 AS FACTORS.

0003220022 FINDS PRODUCTS USING MULTIPLES OF 10 AND 100 AS FACTORS.

0003220023 USES ESTIMATES OF MULTIPLES OF 10 AND 100 TO FIND PRODUCTS.

0003220024 USES DISTRIBUTIVE PRINCIPLE.

O FIND A ONE DIGIT FACTOR TIMES A TWO DIGIT FACTOR.

INCIPLE FOR MULTIPLICATION.

FOR MULTIPLICATION.

FOR MULTIPLICATION.

S FOR GIVEN SETS, NUMBER LINES, PAIRS. ONE DIGIT FACTORS.

UMERAL BY A 1 DIGIT NUMERAL WHERE REGROUPING IS NOT REQUIRED.

PLICATION WHERE THE PRODUCT IS NOT GREATER THAN 25.

BY A 1 DIGIT NUMERAL WHERE REGROUPING IS REQUIRED.

IMES THREE AND FOUR DIGIT FACTORS.

.

AS FACTORS.

OF 10 AND 100 AS FACTORS.

10 AND 100 TO FIND PRODUCTS.

0003225 NUMBER SENTENCES

0003225001 USE MANY DIFFERENT KINDS OF PLACEHOLDERS ; IKE X, Y, N, IN MATHEM

0003225002 USE SENTENCES LIKE 3 X 4 = X, * X 7 = 14, AND 4 X * = .2 TO REPR

0003225003 PLACE THE CORRECT SYMBOL (LESS THAN, GREATER THAN, =) IN THE PLACEH
42 X 87 - 28, AND 65 - 39 X 5 X 7.

0003225004 DETERMINE BETWEENNESS, GREATER THAN, OR LESS THAN FOR NUMBERS TH

0003225005 USES LESS THAN, GREATER THAN, =, TO DISTINGUISH BETWEEN NUMERALS O

0003225006 GIVEN ADDITION AND SUBTRACTION STORY PROBLEMS, WRITE THEM AS NU

0003230 NUMBER SYSTEMS (EARLY)

0003230001 READ ROMAN NUMERALS THROUGH X (10).

0003230002 WRITE ROMAN NUMERALS TO X (10).

0003230003 MATCH ARABIC NUMERALS 1, 5, 10 TO ROMAN NUMERALS I, V, X.

0003230004 STUDENT WILL IDENTIFY THE ROMAN NUMERALS FROM 1-50 IN ANY GIVEN

0003230005 STUDENT WILL LIST THE ROMAN NUMERALS FROM 1-50.

0003240 NUMBERS (PRIME - COMPOSITE)

0003240001 IDENTIFIES PRIME NUMBERS LESS THAN 32.

PLACEHOLDERS ( IKE X, Y, N, IN MATHEMATICAL SENTENCES.

, * X 7 = 14, AND 4 X * = 12 TO REPRESENT PHYSICAL SITUATIONS.

SS THAN, GREATER THAN, =) IN THE PLACEHOLDER IN SENTENCES SUCH AS 3 X 5 X 7 * 8, 25 *
5 X 7.

ER THAN, OR LESS THAN FOR NUMBERS THROUGH 999.

, =, TO DISTINGUISH BETWEEN NUMERALS OF ONE TO FOUR DIGITS.

ON STORY PROBLEMS, WRITE THEM AS NUMBER SENTENCES. TO 3 DIGITS.

X (10).

0).

10 TO ROMAN NUMERALS I, V, X.

MAN NUMERALS FROM 1-50 IN ANY GIVEN ORDER.

NUMERALS FROM 1-50.

S THAN 32.

0003255 NUMERALS

0003255001 USE ORDINAL NUMBERS BEYOND TENTH.

0003255002 WRITE MANY SYMBOLS FOR THE SAME NUMBER, SUCH AS 7 + 5, 4 X 3, 10 + 2

0003255003 RECOGNIZE THAT NUMERALS SUCH AS 57 CAN BE EXPRESSED AS 40 + 17.

0003255004 IDENTIFIES EVEN NUMBERS.

0003255005 IDENTIFIES ODD NUMBERS.

0003255006 WRITES NUMERALS TO 9,999 IN NUMERALS.

0003255007 WRITES NUMERALS TO 9,999 IN WORDS.

0003255008 COUNTS, TO 999,999.

0003255009 READS TO 999,999.

0003255010 WRITES TO 999,999.

0003255011 STUDENT READS NUMBER WORDS TO MILLIONS.

0003255012 STUDENT WRITES NUMBER WORDS TO MILLIONS.

0003270 PLACE VALUE

0003270001 REWRITE 3 DIGIT NUMBERS ROUNDING OFF TO THE NEAREST TEN OR HUNDRED.

H.

NUMBER, SUCH AS 7 + 5, 4 X 3, 10 + 2, AND 12 FOR TWELVE.

57 CAN BE EXPRESSED AS 40 + 17.

ERALS.

DS.

ILLIONS.

MILLIONS.

G OFF TO THE NEAREST TEN OR HUNDRED.

0003270002 TELL THE VALUE OF EACH DIGIT IN A 4 DIGIT NUMBER.

0003270003 WRITE FOUR-DIGIT NUMERALS IN EXPANDED NOTATION; FOR EXAMPLE,

0003270004 NAMES ONE HUNDRED AS 10 TENS, ONE THOUSAND AS 10 HUNDREDS.

0003270005 ADDS ONE MORE TEN, ONE MORE HUNDRED, TO A THREE OR FOUR DIGIT NUM

0003270006 INTERPRET PLACE VALUE TO 10,000.

0003270007 INDENTIFIES PLACE VALUE DIGIT TO 999,999 AS ONES, TENS, HUNDREDS,

0003270008 GIVEN THE PLACE VALUE NAMES, THE STUDENT WILL EXPRESS ANY GIVEN

0003270009 THE STUDENT USES COMMAS TO INDICATE PERIODS TO MILLIONS.

0003270010 NAME DIGITS BY PLACE VALUE THROUGH ONE HUNDRED MILLION.

0003270011 GIVEN ANY NUMERAL TO MILLIONS, THE STUDENT WILL STATE THE RELATI
POSITION TO ITS LEFT.

0003285 RATIO

0003285001 INTERPRET SIMPLE RATIO SITUATIONS, SUCH AS 2 APPLES FOR FOR 15 CEN

0003285002 RECOGNIZE THAT RATIOS SUCH AS 8 TO 20 AND 4 TO 10 ARE EQUIVALENT

GIT IN A 4 DIGIT NUMBER.

IN EXPANDED NOTATION; FOR EXAMPLE, 4567 = 4000 + 500 + 60 + 7.

ENS, ONE THOUSAND AS 10 HUNDREDS.

RE HUNDRED, TO A THREE OR FOUR DIGIT NUMERAL.

10,000.

IGIT TO 999,999 AS ONES, TENS, HUNDREDS, THOUSANDS.

ES, THE STUDENT WILL EXPRESS ANY GIVEN NUMBER THROUGH MILLIONS.

INDICATE PERIODS TO MILLIONS.

E THROUGH ONE HUNDRED MILLION.

IONS, THE STUDENT WILL STATE THE RELATIONSHIP BETWEEN ANY ONE POSITION AND THE

TUATIONS, SUCH AS 2 APPLES FOR FOR 15 CENTS, WRITTEN. 2/15.

AS 8 TO 20 AND 4 TO 10 ARE EQUIVALENT RATIOS (REPRESENT THE SAME RATE).

| | | |
|---|---|---|
| 0003295 | SETS | |
| 0003295001 | RECOGNIZE A NUMBER AS BEING GREATER THAN, EQUAL TO, OR | LESS THAN A SE |
| 0003295002 | EXPRESS A SET OF ELEMENTS IN SET NATATION AND CONCLUDE | IF THE TWO SETS |
| 0003295003 | DEFINE THE SUBSETS OF A GIVEN SET. | |
| 0003295004 | DESCRIBE THE UNION OF TWO SETS. | |
| 0003295005 | FINDS UNION OF SETS. | |
| 0003295006 | DEMONSTRATE WITH SETS OF OBJECTS THE RELATIONSHIP 28 / 7 = 4. | BETWEEN SUCH SE |
| 0003295007 | GIVEN ANY TWO SETS, THE STUDENT WILL NAME THE CROSS | PRODUCTS. |
| 0003315 | SUBRRACTION | |
| 0003315001 | RECOGNIZES SUBTRACTION AS THE INVERSE OF ADDITION. | |
| 0003315002 | WRITES RELATED SUBTRACTION EQUATIONS FOR GIVEN SETS. | |
| 0003315003 | WRITES RELATED SUBTRACTION EQUATIONS FOR GIVEN | NUMBER LINES. |
| 0003315004 | SUBTRACT A 2 OR 3 DIGIT NUMERAL FROM A 3 DIGIT NUMERAL | WITHOUT REGROUP |
| 0003315005 | STUDENT USES THE VERTICAL ALGORISM TO SOLVE SUBTRACTION | PROBLEMS OF THR |
| 0003315006 | SUBTRACTS MULTI-DIGITED NUMERALS. NO GROUPING. | |

ATER THAN, EQUAL TO, OR LESS THAN A SECOND NUMBER.

NATATION AND CONCLUDE IF THE TWO SETS ARE EQUIVALENTS.

ET.

THE RELATIONSHIP BETWEEN SUCH SENTENCES AS 4 X 7 = 28, 28 / 4 = 7 AND

WILL NAME THE CROSS PRODUCTS.

VERSE OF ADDITION.

IONS FOR GIVEN SETS.

IONS FOR GIVEN NUMBER LINES.

FROM A 3 DIGIT NUMERAL WITHOUT REGROUPING.

SM TO SOLVE SUBTRACTION PROBLEMS OF THREE AND FOUR DIGIT NUMERALS.

. NO GROUPING.

0003315007 SUBTRACTS, REGROUPING TENS AS ONES OR HUNDREDS AS TENS. TWO, THREE

0003315008 RECOGNIZES SUBTRACTION-OPERATION. ONE-STEP AND TWO AND THREE STEP

0003315009 SOLVES WRITTEN SUBTRACTION PROBLEMS; ONE-STEP AND TWO AND THREE

0003315010 SOLVE WORD PROBLEMS FOR SUBTRACTION OF 2 NUMERALS WITH NO MORE TH

0003315011 WRITE AND SOLVE EQUATIONS FOR STORY PROBLEMS REQUIRING SUBTRACTIO

0003320 SUBTRACTION (WORD PROBLEMS)

0003320001 SOLVE TO THE NEAREST MINUTE, 1 STEP SUBTRACTION STORY PROBLEMS I

0003325 VALUE OF COINS

0003325001 IDENTIFIES PENNY AS REPRESENTING THE ONES DIGIT AND DIME AS REPRESE

0003325002 CONVERTS VALUES IN CENTS TO DOLLARS AND CENTS, USING THE USUAL DECI

0003325003 GIVES VALUE OF COIN COLLECTIONS IN CENTS.

0003325004 INDICATES CHANGE.

0003325005 MAKE CHANGE FOR ANY PURCHASE UP TO $1.00.

0003325006 COUNTS CHANGE STARTING WITH THE TOTAL VALUE OF THE PURCHASE.

AS ONES OR HUNDREDS AS TENS. TWO, THREE, FOUR DIGIT NUMERALS.

ATION. ONE-STEP AND TWO AND THREE STEPS WHEN STEPS ARE INDICATED.

PROBLEMS; ONE-STEP AND TWO AND THREE STEPS WHEN STEPS ARE INDICATED.

RACTION OF 2 NUMERALS WITH NO MORE THAN 4 DIGITS.

OR STORY PROBLEMS REQUIRING SUBTRACTION OF 1 OR 2 DIGIT NUMBERS.

1 STEP SUBTRACTION STORY PROBLEMS INVOLVING TIME.

NTING THE ONES DIGIT AND DIME AS REPRESENTING THE TENS DIGIT.

DOLLARS AND CENTS, USING THE USUAL DECIMAL NOTATION.

IONS IN CENTS.

UP TO $1.00.

THE TOTAL VALUE OF THE PURCHASE.

0003325007 IDENTIFIES CHANGE IN COINS WITH PURCHASE AMOUNTS LESS THAN $10.00.

0003325008 ADDS, MONEY VALUES, USING CENT AND DECIMAL NOTATION TO $10.00.

0003325009 SUBTRACTS MONEY VALUES, USING CENT AND DECIMAL NOTATION TO $10.00.

| | | |
|---|---|---|
| 0004005 | ADDITION | |
| 0004005001 | STUDENT IDENTIFIES AND ILLUSTRATES PROPERTIES OF WHOLE | NUMBERS |
| 0004005002 | DO COLUMN ADDITION WITH SEVERAL FOUR-PLACE OR FIVE-PLACE | ADDENDS. |
| 0004005003 | ADDS, WITH REGROUPING, MULTI-DIGITED NUMBERS, MULTIPLE | ADDENDS. |
| 0004020 | CLOCK (MODULO) ARITHEMATIC | |
| 0004020001 | GIVEN ADDITION, SUBTRACTION, AND MULTIPLICATION ARITHMETIC. | PROBLEMS |
| 0004025 | DECIMALS | |
| 0004025001 | SOLVE WORD PROBLEMS WHICH REQUIRE DIVISION OF A DECIMAL | BY A WHO |
| 0004030 | DIVISION | |
| 0004030001 | USE THE NUMBER LINE TO ILLUSTRATE DIVISION PROBLEMS. | |
| 0004030002 | ACCURATELY SOLVE DIVISION PROBLEMS BY USING REPEATED | SUBTRACTI |
| 0004030003 | USE THE SUBTRACTIVE DIVISION ALGORITHM WITH TWO-PLACE | DIVISORS |
| 0004030004 | USE SENTENCES LIKE * X 5 = 45 ÷ 5 = X TO SHOW DIVISION | AS THE IN |
| 0004030005 | RECOGNIZE GROUPS OF EQUIVALENT SETS IN OPERATIONS | INVOLVING |

TRATES PROPERTIES OF WHOLE NUMBERS UNDER ADDITION.

RAL FOUR-PLACE OR FIVE-PLACE ADDENDS.

-DIGITED NUMBERS. MULTIPLE ADDENDS. USES ADDITION ALGORITHM.

AND MULTIPLICATION PROBLEMS. STUDENTS CAN SOLVE THEM USING CLOCK

QUIRE DIVISION OF A DECIMAL BY A WHOLE NUMBER.

TRATE DIVISION PROBLEMS.

OBLEMS BY USING REPEATED SUBTRACTION.

ALGORITHM WITH TWO-PLACE DIVISORS ENDING IN 1, 2, 3, 4.

5 + 5 = X TO SHOW DIVISION AS THE INVERSE OF MULTIPLICATION.

NT SETS IN OPERATIONS INVOLVING DIVISION.

0004030006 RECOGNIZE THE SPECIAL ROLE OF 1 AS A DIVISOR.

0004030007 EXHIBITS MASTERY OF DIVISION FACTS THROUGH 144 DIVIDED BY 12.

0004030008 USES DIVISION ALGORITHM WITH ONE DIGIT DIVISOR, MULTI- DIGITED QUOTIE

0004030009 CHECKS DIVISION PROBLEMS BY INVERSE OPERATION OF MULTIPLICATION

0004030010 FINDS ONE AND TWO DIGIT QUOTIENTS WHEN DIVISOR IS A TWO DIGIT MULTIPLE

0004030011 SOLVES DIVISION EQUATIONS INVOLVING TWO-DIGIT DIVISORS, ONE-DIGIT QUOT

0004030012 FINDS AVERAGES; ONE DIGIT DIVISOR, TWO DIGIT QUOTIENT.

0004030013 SOLVES DIVISION EQUATIONS INVOLVING TWO-DIGIT DIVISORS, ONE-DIGIT QUOT

0004035 ESTIMATION

0004035001 USES ESTIMATION TO FIND MISSING FACTORS; MULTIPLES OF 10 AND 100.

0004035002 ESTIMATES PRODUCTS BY ROUNDING TO APPROPRIATE PLACES.

0004035003 ESTIMATES QUOTIENTS BY ROUNDING TO APPROPRIATE PLACES.

0004035004 ESTIMATE THE PRODUCT OF TWO NUMBERS AND THE QUOTIENT OF TWO NUMBERS.
X 90 OR 1800 AND 795 ÷ 23 IS APPROXIMATELY 800 ÷ 20 OR 16000.

1 AS A DIVISOR.

FACTS THROUGH 144 DIVIDED BY 12.

ONE DIGIT DIVISOR, MULTI- DIGITED QUOTIENT.

NVERSE OPERATION OF MULTIPLICATION.

ENTS WHEN DIVISOR IS A TWO DIGIT MULTIPLE OF 10.

OLVING TWO-DIGIT DIVISORS, ONE-DIGIT QUOTIENTS, WITH REMAINDER.

VISOR, TWO DIGIT QUOTIENT.

OLVING TWO-DIGIT DIVISORS, ONE-DIGIT QUOTIENTS, WITHOUT REMAINDER.

NG FACTORS; MULTIPLES OF 10 AND 100.

G TO APPROPRIATE PLACES.

NG TO APPROPRIATE PLACES.

UMBERS AND THE QUOTIENT OF TWO NUMBERS. FOR EXAMPLE, 21 X 88 IS APPROXIMATELY 20
APPROXIMATELY 800 + 20 OR 16000.

| | | |
|---|---|---|
| 0004045 | FRACTIONS | |
| 0004045001 | TELL WHAT THE PARTS OF A FRACTION SYMBOL STANDS FOR. | |
| 0004045002 | USES NUMERATOR, DENOMINATOR TO IDENTIFY FRACTIONAL | PARTS. |
| 0004045003 | RECOGNIZE THAT A GIVEN FRACTION IS THE SAME AS A GIVEN | PICTURE O |
| 0004045004 | WRITE THE FRACTION SYMBOL FOR A GIVEN PART OF A WHOLE. | |
| 0004045005 | GIVEN A PICTURE OF A FRACTION AND ITS FRACTION SYMBOL, PICTURE INTO SMALLER EQUAL PARTS AND WRITING THE NEW | DEMONSTRA SYMBOL. |
| 0004045006 | GIVEN A LINE SEGMENT DIVIDED INTO EQUAL PARTS AND A YOUR KNOWLEDGE OF FRACTIONS BY DIVIDING THE LINE SEGMENT | FRACTION INTO SMA |
| 0004045007 | GIVEN TWO DIFFERENT FRACTIONS EACH OF WHICH IS LESS | THAN ONE. |
| 0004045008 | WRITE THE FRACTION THAT EXPRESSES THE RELATIONSHIP | BETWEEN P |
| 0004045009 | WRITE AT LEAST THREE FRACTIONS FOR A GIVEN WHOLE NUMBER | ON THE NU |
| 0004045010 | GIVEN A POINT TO THE LEFT OF 1 ON THE NUMBER LINE, WRITE NUMBER LINE. | AT LEAST |
| 0004045011 | WRITE A FRACTION FOR A GIVEN POINT TO THE RIGHT OF | NUMBER 1 |
| 0004045012 | WRITE AN IMPROPER FRACTION FOR A GIVEN PICTURE THAT | SHOWS A F |
| 0004045013 | EXPRESS A GIVEN IMPROPER FRACTION AS A WHOLE NUMBER | AND A FRA |
| 0004045014 | DETERMINES WHETHER A FRACTION IS IN LOWEST TERMS. | |

ACTION SYMBOL STANDS FOR.

TO IDENTIFY FRACTIONAL PARTS.

TION IS THE SAME AS A GIVEN PICTURE OF THE FRACTION.

OR A GIVEN PART OF A WHOLE.

ON AND ITS FRACTION SYMBOL, DEMONSTRATE YOUR KNOWLEDGE OF FRACTIONS BY DIVIDING THE PARTS AND WRITING THE NEW SYMBOL.

D INTO EQUAL PARTS AND A FRACTION SYMBOL THAT NAMES A SECTION OF IT, DEMONSTRATE BY DIVIDING THE LINE SEGMENT INTO SMALLER EQUAL PARTS AND WRITING THE NEW SYMBOL.

NS EACH OF WHICH IS LESS THAN ONE, WRITE THEM IN ORDER ON THE NUMBER LINE.

RESSES THE RELATIONSHIP BETWEEN PART OF A LINE SEGMENT AND THE WHOLE SEGMENT.

ONS FOR A GIVEN WHOLE NUMBER ON THE NUMBER LINE.

F 1 ON THE NUMBER LINE, WRITE AT LEAST THREE FRACTIONS THAT NAME THAT POINT ON THE

N POINT TO THE RIGHT OF NUMBER 1 ON THE NUMBER LINE.

FOR A GIVEN PICTURE THAT SHOWS A FRACTION GREATER THAN 1,

ACTION AS A WHOLE NUMBER AND A FRACTION.

ON IS IN LOWEST TERMS.

| | | |
|---|---|---|
| 0004045015 | WRITE A SET OF AT LEAST THREE FRACTIONS THAT ARE EQUAL A GIVEN FRACTION BY THE SAME NUMBER. | TO EACH OTHER |
| 0004045016 | BUILDS SETS OF EQUIVALENT FRACTIONS FROM A GIVEN | FRACTION AND U |
| 0004045017 | IDENTIFIES FRACTIONS RELATED TO ORDERED PAIRS OF FOURTHS) WITH ONE AS THE NUMERATOR AND WITH NUMERATORS | NUMBERS, PARTS GREATER THAN O |
| 0004045018 | SOLVES WORD PROBLEMS INVOLVING FRACTIONS IN LOWEST | TERMS. |
| 0004045019 | SOLVES WORD PROBLEMS INVOLVING EQUIVALENT FRACTIONS. | |
| 0004045020 | STUDENT ADDS AND SUBTRACTS PROPER FRACTIONS HAVING LIKE | DENOMINATORS. |
| 0004045021 | SOLVES ADDITION EQUATIONS INVOLVING LIKE FRACTIONS AND | MIXED FRACTION |
| 0004050 | GEOMETRY (COORDINATE SYSTEMS) | |
| 0004050001 | RECOGNIZE THAT A LINE SEGMENT IS A SET OF POINTS. | |
| 0004050002 | USES TERMS GRAPH, AXIS, COORDINATE AXES, WHEN GRAPHING | NUMBER PAIRS. |
| 0004050003 | RECOGNIZE THAT POINTS IN A PLANE (THE FIRST QUADRANT) (COORDINATES). | CAN BE REPRESE |
| 0004050004 | GRAPHS SETS OF COORDINATES (FUNCTIONS). OBSERVES | PATTERN. |
| 0004055 | GEOMETRY (PLANE FIGURES) - ANGLES - | |
| 0004055001 | GIVEN 2 LINES THAT CROSS EACH OTHER, FIND THE EQUAL | ANGLES. |

RACTIONS THAT ARE EQUAL TO EACH OTHER BY MULTIPLYING THE TOP AND THE BOTTOM OF
MBER.

IONS FROM A GIVEN FRACTION AND USES CROSS PRODUCT METHOD TO CHECK.

ORDERED PAIRS OF NUMBERS, PARTS OF REGIONS, AND SETS (THROUGH TWENTY-
TOR AND WITH NUMERATORS GREATER THAN ONE.

FRACTIONS IN LOWEST TERMS.

EQUIVALENT FRACTIONS.

ER FRACTIONS HAVING LIKE DENOMINATORS.

VING LIKE FRACTIONS AND MIXED FRACTIONS.

S A SET OF POINTS.

ATE AXES, WHEN GRAPHING NUMBER PAIRS.

E (THE FIRST QUADRANT) CAN BE REPRESENTED BY (ORDERED) PAIRS OF NUMBERS

CTIONS). OBSERVES PATTERN.

ES -

THER, FIND THE EQUAL ANGLES.

0004055002 GIVEN ANGLES, THE STUDENT WILL IDENTIFY BY NON-METRIC JUDGMENT,

0004060 GEOMETRY (PLANE FIGURES) - CIRCLE -

0004060001 IDENTIFY THE FOLLOWING PARTS OF A GIVEN CIRCLE: CENTER, RADIUS, D

0004060002 LOCATES PARTS - CENTER RADIUS, DIAMETER, CHORD OF A CIRCLE.

0004060003 IDENTIFIES CENTRAL AND INSCRIBED ANGLES, INSCRIBED CIRCLES, C

0004060004 RECOGNIZES A TANGENT TO A CIRCLE.

0004065 GEOMETRY (PLANE FIGURES) - CONGRUENCE -

0004065001 RECOGNIZE CONGRUENT ANGLES.

0004070 GEOMETRY (PLANE FIGURES) - CONSTRUCTIONS -

0004070001 REPRODUCE A LINE SEGMENT BY USING A COMPASS AND STRAIGHT EDGE.

0004070002 BISECT A LINE SEGMENT BY USING A COMPASS AND STRAIGHT- EDGE.

0004070003 DEMONSTRATE THROUGH PAPER FOLDING AN UNDERSTANDING OF A LINE AS AN

0004070004 GIVEN THE RADIUS OR THE DIAMETER OF A CIRCLE, CONSTRUCT THE CIRCLE

WILL IDENTIFY BY NON-METRIC JUDGMENT, THOSE WHICH ARE RIGHT ANGLES.

CIRCLE -

TS OF A GIVEN CIRCLE: CENTER, RADIUS, DIAMETER, CHORD.

IUS, DIAMETER, CHORD OF A CIRCLE.

CRIBED ANGLES, INSCRIBED CIRCLES, CIRCUMSCRIBED CIRCLE.

CIRCLE.

CONGRUENCE -

CONSTRUCTIONS -

Y USING A COMPASS AND STRAIGHT EDGE.

SING A COMPASS AND STRAIGHT- EDGE.

TOLDING AN UNDERSTANDING OF A LINE AS AN INTERSECTION OF TWO PLANES.

METER OF A CIRCLE, CONSTRUCT THE CIRCLE.

0004070005 CONSTRUCT A CIRCLE THROUGH THREE GIVEN POINTS THAT ARE NOT IN A STRAI
GIVEN TRIANGLE.

0004070006 CONSTRUCT CENTRAL AND INSCRIBED ANGLES, INSCRIBED CIRCLES, CIRCU

0004090 GEOMETRY (PLANE FIGURES) - POLYGONS -

0004090001 RECOGNIZE ISOSCELES AND EQUILATERAL TRIANGLES AND PARALLELOGRAMS

0004090002 MEASURE PERIMETERS OF TRIANGLES AND QUADRILATERALS.

0004090003 FINDS PERIMETER OF POLYGONS BY MEASURING.

0004090004 FIND THE SUM OF THE MEASURES OF THE ANGLES OF A GIVEN TRIANGLE OR OF

0004090005 FIND AND DESCRIBE THE VERTICES AND THE DIAGONALS OF A GIVEN POLYGON.

0004095 GEOMETRY (PLANE FIGURES) - QUADRILATERALS -

0004095001 RECOGNIZE THE FIGURE FORMED BY JOINING THE MIDPOINTS OF THE FOUR SIDES

0004100 GEOMETRY (PLANE FIGURES) - SETS OF POINTS -

0004100001 RECOGNIZE A PLANE AS A FLAT SURFACE WHICH CONTAINS LINES AND POINTS.

0004100002 RECOGNIZE AND DESCRIBE A POINT, A LINE, AND A PLANE.

GIVEN POINTS THAT ARE NOT IN A STRAIGHT LINE, AND INSCRIBE A CIRCLE IN A

ANGLES, INSCRIBED CIRCLES, CIRCUMSCRIBED CIRCLE.

ONS -

RAL TRIANGLES AND PARALLELOGRAMS.

AND QUADRILATERALS.

EASURING.

THE ANGLES OF A GIVEN TRIANGLE OR OF A GIVEN QUADRILATERAL WITHOUT MEASURING.

ND THE DIAGONALS OF A GIVEN POLYGON.

ILATERALS -

OINING THE MIDPOINTS OF THE FOUR SIDES OF A GIVEN QUADRILATERAL.

OF POINTS -

ACE WHICH CONTAINS LINES AND POINTS.

A LINE, AND A PLANE.

| | |
|---|---|
| 0004100003 | RECOGNIZE AND DESCRIBE A LINE SEGMENT AND AN ANGLE. |
| 0004100004 | IDENTIFIES A SIMPLE CLOSED CURVE AS A REGION OF A PLANE. |
| 0004100005 | RECOGNIZE PARALLEL LINES AS LINES IN A PLANE WHICH DO NOT INTER |
| 0004100006 | INTERPRET A CIRCLE AS THE SET OF ALL POINTS IN A PLANE THAT ARE |
| 0004105 | GEOMETRY (PLANE FIGURES) - SIMILARITY - |
| 0004105001 | RECOGNIZE THAT ALL CONGRUENT FIGURES ARE SIMILAR BUT NOT ALL SIMIL |
| 0004115 | GEOMETRY (PLANE FIGURES) - SYMMETRY - |
| 0004115001 | RECOGNIZE THAT SOME FIGURES HAVE TWO OR MORE AXES OF SYMMETRY |
| 0004130 | GEOMETRY (SIZE AND SHAPE) |
| 0004130001 | GIVEN A GROUP OF OBJECTS OR PICTURES, STUDENTS CAN ACCURATEL OF MEASURE. |
| 0004130002 | GIVEN A GROUP OF OBJECTS OR PICTURES, STUDENTS CAN ACCURATEL MEASURE. |
| 0004130003 | FIND AREAS OF SIMPLE REGIONS INFORMALLY; FOR EXAMPLE, A RECTANGUL CAN BE COVERED BY SIX ONE-INCH SQUARES (REGIONS). |
| 0004130004 | GIVEN A GROUP OF OBJECTS OR PICTURES, STUDENTS CAN ACCURATEL MEASURE. |

SEGMENT AND AN ANGLE.

RVE AS A REGION OF A PLANE.

INES IN A PLANE WHICH DO NOT INTERSECT.

OF ALL POINTS IN A PLANE THAT ARE AT THE SAME DISTANCE FROM A FIXED POINT.

MILARITY -

FIGURES ARE SIMILAR BUT NOT ALL SIMILAR FIGURES ARE CONGRUENT.

MMETRY -

AVE TWO OR MORE AXES OF SYMMETRY THROUGH PAPER FOLDING.

ICTURES, STUDENTS CAN ACCURATELY ESTIMATE THE LENGTH USING THE CORRECT UNITS

ICTURES, STUDENTS CAN ACCURATELY ESTIMATE AREA USING THE CORRECT UNITS OF

INFORMALLY; FOR EXAMPLE, A RECTANGULAR REGION WITH DIMENSIONS 2 INCHES BY 3 INCHES
H SQUARES (REGIONS).

ICTURES, STUDENTS CAN ACCURATELY ESTIMATE VOLUME USING THE CORRECT UNITS OF

| | | |
|---|---|---|
| 0004135 | GEOMETRY (SOLIDS) | |
| 0004135001 | IDENTIFIES THE FACE, EDGE, VERTEX OF A CUBE AND | TRIANGULAR PYR |
| 0004135002 | CONSTRUCTS MODELS FROM GIVEN PATTERN FOR CUBE AND | TRIANGULAR PYR |
| 0004135003 | IDENTIFIES CYLINDER, CONE. | |
| 0004135004 | CONSTRUCTS MODEL FROM GIVEN PATTERN FOR CYLINDER AND | CONE. |
| 0004140 | GEOMETRY (SPACE RELATIONSHIPS) | |
| 0004140001 | INTERPRET SPACE AS THE SET OF ALL POINTS. | |
| 0004140002 | DESCRIBE LINES AS INTERSECTIONS OF PLANES. | |
| 0004150 | INVERSE (ADDITIVE) | |
| 0004150001 | RECOGNIZE THE INVERSE RELATION BETWEEN ADDITION<br>342 = 1067 AND 1067 - 725 = 342, AND 1067 - 342 = 725. | SENTENCES AND |
| 0004165 | MEASUREMENT (AREA) | |
| 0004165001 | USES ARBITRARY STANDARD METRIC UNITS TO MEASURE AREA. | |
| 0004170 | MEASUREMENT (DRY) | |
| 0004170001 | SOLVES PROBLEMS USING CONVERSIONS OF DRY MEASURES | (OUNCES, POUND |

EX OF A CUBE AND TRIANGULAR PYRAMID.

TTERN FOR CUBE AND TRIANGULAR PYRAMID.

TERN FOR CYLINDER AND CONE.

LL POINTS.

OF PLANES.

BETWEEN ADDITION SENTENCES AND TWO SUBTRACTION SENTENCES, SUCH AS 725 +
, AND 1067 - 342 = 725.

UNITS TO MEASURE AREA.

NS OF DRY MEASURES (OUNCES, POUNDS, PECKS, BUSHELS, TONS).

| | | |
|---|---|---|
| 0004180 | MEASUREMENT (LINEAR) | |
| 0004180001 | USES ARIBITRARY STANDARD (ENGLISH) UNITS TO MEASURE | LENGTH. |
| 0004180002 | USES METRIC UNITS TO MEASURE LENGTH. | |
| 0004180003 | SOLVES PROBLEMS USING CONVERSIONS OF LINEAR MEASURES | (INCHES, F |
| 0004185 | MEASUREMENT (LIQUID) | |
| 0004185001 | EXPRESS DIFFERENT NAMES FOR THE SAME MEASURE. | |
| 0004185002 | SOLVES PROBLEMS USING CONVERSIONS OF LIQUID MEASURES | (TABLESPOO |
| 0004210 | MEASUREMENT (TIME) | |
| 0004210001 | READS TIME ON CLOCK WITH SECOND HAND. | |
| 0004210002 | IDENTIFIES EQUIVALENT VALUES FOR DECADE, CENTURY, | NUMBER OF |
| 0004210003 | SOLVES WRITTEN PROBLEMS INVOLVING ADDITION AND REGROUPINGS. | SUBTRACTIO |
| 0004210004 | SOLVE PROBLEMS INVOLVED IN CONVERTING DAYS TO WEEKS, | HOURS TO D |
| 0004210005 | SOLVES PROBLEMS IN READING BUS, TRAIN, PLANE SCHEDULES. | |
| 0004210006 | NAMES VERY SMALL, VERY LARGE TIME UNITS (SECONDS, | MILLENIUM) |

GLISH) UNITS TO MEASURE LENGTH.

LENGTH.

SIONS OF LINEAR MEASURES (INCHES, FEET, YARDS, MILES).

THE SAME MEASURE.

SIONS OF LIQUID MEASURES (TABLESPOONS, OUNCES, CUPS, PINTS, QUARTS, GALLONS).

ND HAND.

FOR DECADE, CENTURY, NUMBER OF DAYS IN A LEAP YEAR.

LVING ADDITION AND SUBTRACTION OF TWO OR THREE TIME UNITS, ONE OR TWO

ONVERTING DAYS TO WEEKS, HOURS TO DAYS, MINUTES TO HOURS, SECONDS TO MINUTES.

US, TRAIN, PLANE SCHEDULES.

TIME UNITS (SECONDS, MILLENIUM).

| | | |
|---|---|---|
| 0004215 | MEASUREMENT (VOLUME) | |
| 0004215001 | USES ARIBITRARY STANDARD (ENGLISH) UNITS TO MEASURE | VOLUME. |
| 0004215002 | USES ARBITRARY STANDARD METRIC UNITS TO MEASURE VOLUME. | |
| 0004220 | MULTIPLICATION | |
| 0004220001 | SOLVE MULTIPLICATION PROBLEMS BY USING REPEATED | ADDITION. |
| 0004220002 | RECOGNIZE GROUPS OF EQUIVALENT SETS IN OPERATIONS | INVOLVING MUL |
| 0004220003 | RECALL THE MULTIPLICATION FACTS THROUGH 10 X 10. | |
| 0004220004 | GIVEN MULTIPLICATION EQUATIONS, STUDENTS CAN SELECT | NUMBERS THAT |
| 0004220005 | MULTIPLY A 2 DIGIT NUMBER BY A 2 DIGIT MULTIPLE OF 10. | |
| 0004220006 | MULTIPLY A NUMBER BY MULTIPLES OF 100. | |
| 0004220007 | MULTIPLY 1, 2, AND 3 DIGIT NUMBERS BY 1000. | |
| 0004220008 | USE THE MULTIPLICATION ALGORITHM WITH TWO-PLACE | MULTIPLIERS. |
| 0004220009 | MULTIPLY ANY 3 DIGIT NUMBER AND A 2 DIGIT NUMBER. | |
| 0004220010 | FIND SOLUTIONS FOR SENTENCES LIKE 723 X * = * X 723 TO MULTIPLICATION. | GENERALIZE TH |
| 0004220011 | GENERALIZE THE DISTRIBUTIVE PROPERTY OF MULTIPLICATION | OVER ADDITION |

(SH) UNITS TO MEASURE VOLUME.

UNITS TO MEASURE VOLUME.

Y USING REPEATED ADDITION.

SETS IN OPERATIONS INVOLVING MULTIPLICATION.

THROUGH 10 X 10.

STUDENTS CAN SELECT NUMBERS THAT ARE FACTORS.

2 DIGIT MULTIPLE OF 10.

OF 100.

ERS BY 1000.

M WITH TWO-PLACE MULTIPLIERS.

A 2 DIGIT NUMBER.

KE 723 X * = * X 723 TO GENERALIZE THE IDEA OF THE COMMUTATIVE PROPERTIES OF

PERTY OF MULTIPLICATION OVER ADDITION.

0004225 NUMBER SENTENCES

0004225001 USE SENTENCES LIKE 36 ÷ 4 = X AND X X 3 = 12 TO REPRESENT SENTENCES.

0004225002 FIND SOLUTIONS FOR SENTENCES LIKE * X Y = 36.

0004225003 FIND SOLUTIONS FOR MATHEMATICAL SENTENCES INVOLVING MORE THAN ONE * * = 10.

0004225004 MAKE UP PROBLEM SITUATIONS TO FIT MATHEMATICAL SENTENCES INVOLVING A STORY TO FIT THE SENTENCE: (3 X 4) ÷ 2 = *.

0004225005 RECOGNIZE THAT 3 X * = 7 HAS NO WHOLE NUMBER SOLUTION.

0004225006 USES GREATER THAN, LESS THAN, = TO DISTINGUISH BETWEEN NUMERALS

0004230 NUMBER SYSTEMS (EARLY)

0004230001 RECOGNIZE ROMAN NUMERALS 1 THROUGH XXX1X.

0004230002 USE ROMAN NUMERALS THROUGH XXV.

0004230003 STUDENT WILL WRITE ROMAN NUMERALS TO 100.

0004240 NUMBERS (PRIME - COMPOSITE)

0004240001 DETERMINES WHETHER A NUMBER IS PRIME OR COMPOSITE.

0004240002 FINDS COMMON FACTORS AND GREATEST COMMON FACTOR OF NUMERALS.

X AND X X 3 = 12 TO REPRESENT PHYSICAL SITUATIONS AND FIND SOLUTIONS FOR TH

S LIKE * X Y = 36.

ICAL SENTENCES INVOLVING MORE THAN ONE OPERATION SUCH AS (2 X 5) + 4 = * AND (3 X 2)

TO FIT MATHEMATICAL SENTENCES INVOLVING MORE THAN ONE OPERATION; FOR EXAMPLE, MAKE UP
(3 X 4) + 2 = *.

S NO WHOLE NUMBER SOLUTION.

AN, = TO DISTINGUISH BETWEEN NUMERALS THROUGH MILLIONS.

THROUGH XXX1X.

XXV.

MERALS TO 100.

IS PRIME OR COMPOSITE.

EATEST COMMON FACTOR OF NUMERALS.

| | | |
|---|---|---|
| 0004245 | NUMBERS (RATIONAL AND IRRATIONAL) | |
| 0004245001 | STUDENT IDENTIFIES AND ILLUSTRATES THE PROPERTIES OF | RATIONAL NUMBE |
| 0004245002 | SOLVE MULTIPLICATION PROBLEMS INVOLVING ODD AND EVEN | NUMBERS. |
| 0004245003 | SOLVE DIVISION PROBLEMS INVOLVING ODD AND EVEN NUMBERS. | |
| 0004250 | NUMBERS (WHOLE) | |
| 0004250001 | DEMONSTRATE THAT THE WAY IN WHICH YOU GROUP WHOLE ANSWER. | NUMBERS IN AN |
| 0004250002 | DEMONSTRATE THAT THE ORDER IN WHICH YOU ADD TWO WHOLE | NUMBERS DOES N |
| 0004250003 | DEMONSTRATE THAT SUBTRACTION UNDOES ADDITION FOR WHOLE | NUMBERS. |
| 0004250004 | DEMONSTRATE THAT THE ORDER IN WHICH YOU MULTIPLY TWO | WHOLE NUMBERS |
| 0004250005 | DEMONSTRATE THE WAY YOU GROUP NUMBERS IN A | MULTIPLICATION |
| 0004250006 | DEMONSTRATE THAT DIVISION UNDOES MULTIPLICATION FOR | WHOLE NUMBERS. |
| 0004255 | NUMERALS | |
| 0004255001 | COUNTS THROUGH MILLIONS. | |
| 0004255002 | READS THROUGH MILLIONS. | |
| 0004255003 | WRITES THROUGH MILLIONS. | |

| | |
|---|---|
| ES THE PROPERTIES OF | RATIONAL NUMBERS UNDER ADDITION AND ITS INVERSE. |
| VOLVING ODD AND EVEN | NUMBERS. |
| G ODD AND EVEN NUMBERS. | |
| | |
| H YOU GROUP WHOLE | NUMBERS IN AN ADDITION PROBLEM DOES NOT CHANGE THE |
| ICH YOU ADD TWO WHOLE | NUMBERS DOES NOT CHANGE THE ANSWER. |
| OES ADDITION FOR WHOLE | NUMBERS. |
| ICH YOU MULTIPLY TWO | WHOLE NUMBERS DOES NOT CHANGE THE ANSWER. |
| MBERS IN A | MULTIPLICATION PROBLEM DOES NOT CHANGE THE ANSWER. |
| MULTIPLICATION FOR | WHOLE NUMBERS. |

0004255004 READ NUMERALS AS NEEDED.

0004255005 WRITE NUMERALS AS NEEDED.

0004270 PLACE VALUE

0004270001 RECOGNIZE THE PLACE VALUE CONCEPTS AS THEY RELATE TO INEQUALITI

0004270002 NAMES ONE THOUSAND AS 100 TENS; ONE MILLION AS 1000 THOUSANDS.

0004270003 ADDS ONE MORE TO THOUSANDS AND MILLIONS DIGITS.

0004270004 IDENTIFIES PLACE VALUE DIGITS THROUGH MILLIONS.

0004270005 WRITES SEVEN DIGIT NUMBERS IN EXPANDED NOTATION, WORDS, NUMERALS.

0004270006 INTERPRET PLACE VALUE FOR LARGE NUMBERS.

0004285 RATIO

0004285001 MAKE UP SETS OF EQUIVALENT RATIOS FOR GIVEN PHYSICAL SITUATIONS.

0004285002 DETERMINE IF TWO RATIOS ARE EQUIVALENT BY USING THE PROPERTY OF MULTIPLICATION. FOR EXAMPLE, 3/4 = 9/12 BECAUSE 3 x 12 = 4 X 9, WH

0004285003 FIND THE MISSING WHOLE NUMBER IN TWO EQUIVALENT RATIOS LIKE 2/3 =

0004285004 USE EQUIVALENT RATIOS TO CONVERT UNITS OF MEASURE TO FIND HOW MA

| | |
|---|---|
| NCEPTS AS THEY RELATE TO | INEQUALITIES. |
| NS; ONE MILLION AS 1000 | THOUSANDS. |
| ND MILLIONS DIGITS. | |
| S THROUGH MILLIONS. | |
| N EXPANDED NOTATION, WORDS, | NUMERALS. |
| RGE NUMBERS. | |
| ATIOS FOR GIVEN PHYSICAL | SITUATIONS, SUCH AS 1/2, 2/4, 3/6, 4/8, . . . |
| EQUIVALENT BY USING THE<br>, 3/4 = 9/12 BECAUSE 3 X 12 | PROPERTY OF PROPORTIONS COMMONLY CALLED CROSS<br>= 4 X 9, WHEREAS 6/7 = 7/8 BECAUSE 6 X 8 = 7 X 7. |
| R IN TWO EQUIVALENT RATIOS | LIKE 2/3 = X/9 OR 5/X = 25/70. |
| VERT UNITS OF MEASURE TO | FIND HOW MANY PINTS THERE ARE IN 3 GALLONS. |

| | | |
|---|---|---|
| 0004295 | SETS | |
| 0004295001 | GIVEN A SET, THE STUDENT WILL DESCRIBE AN APPROPRIATE | UNIVERSE. |
| 0004295002 | GIVEN A UNIVERSAL SET AND AN OPEN SENTENCE, THE STUDENT | WILL DESCRIBE |
| 0004295003 | GIVEN SETS, THE STUDENT WILL IDENTIFY THEM AS FINITE OR | INFINITE. |
| 0004315 | SUBTRACTION | |
| 0004315003 | SUBTRACT USING THREE-PLACE NUMERALS AND FOUR-PLACE | NUMERALS. |
| 0004325 | VALUE OF COINS | |
| 0004325001 | STUDENTS CAN ACCURATELY APPLY MONEY NOTATION TO | ADDITION. |
| 0004325002 | APPLY MONEY NOTATION TO SUBTRACTION. | |

WILL DESCRIBE AN APPROPRIATE UNIVERSE.

AN OPEN SENTENCE, THE STUDENT WILL DESCRIBE THE SOLUTION SET.

ILL IDENTIFY THEM AS FINITE OR INFINITE.

E NUMERALS AND FOUR-PLACE NUMERALS.

PPLY MONEY NOTATION TO ADDITION.

UBTRACTION.

| | |
|---|---|
| 0005005 | ADDITION |
| 0005005001 | STUDENT REGROUPS TO SOLVE MULTI-DIGIT ADDITION PROBLEMS. |
| 0005005002 | FIND THE SUM OF 4 ADDENDS WITH UP TO 4 DIGITS EACH. |
| 0005005003 | SOLVES ANY GIVEN ADDITION EQUATION INVOLVING WHOLE NUMBERS U |
| 0005005004 | WRITE AN EQUATION FOR A WORD PROBLEM INVOLVING ADDITION AND FIND |
| 0005015 | BASES |
| 0005015001 | GIVES BASE 4 NUMERAL FOR A GIVEN SET. |
| 0005015002 | GIVES FACE VALUE OF BASE 4 DIGITS. |
| 0005015003 | IDENTIFIES BASE 4 DIGITS. |
| 0005015004 | GIVES PLACE VALUE, BASE 4 DIGITS. |
| 0005015005 | GIVES TOTAL VALUE OF BASE 4 DIGITS. |
| 0005015006 | CONVERTS BASE 10 NUMERAL TO BASE 4. |
| 0005015007 | CONVERTS BASE 4 NUMERAL TO BASE 10. |
| 0005025 | DECIMALS |
| 0005025001 | RECOGNIZES DECIMALS AS NAMES FOR RATIONAL NUMBERS. |

SOLVE MULTI-DIGIT ADDITION PROBLEMS.

DENDS WITH UP TO 4 DIGITS EACH.

ITION EQUATION INVOLVING WHOLE NUMBERS USING THE ADDITION ALGORITHM.

R A WORD PROBLEM INVOLVING ADDITION AND FIND THE ANSWER.

FOR A GIVEN SET.

BASE 4 DIGITS.

GITS.

ASE 4 DIGITS.

BASE 4 DIGITS.

ERAL TO BASE 4.

RAL TO BASE 10.

AS NAMES FOR RATIONAL NUMBERS.

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0005025002      READ SIMPLE DECIMALS.

0005025003      WRITE SIMPLE DECIMALS.

0005025004      READS RATIONAL NUMBERS USING DECIMAL NOTATION FOR        TENTHS, HUNDR

0005025005      EXPRESS FRACTIONS WITH DENOMINATORS OF 10, 100, 1000 AS  DECIMALS.

0005025006      EXPRESS DECIMALS GIVEN IN TENTHS, HUNDREDTHS, OR         THOUSANDTHS A

0005025007      WRITES RATIONAL NUMBERS USING DECIMAL NOTATION FOR       TENTHS, HUNDR

0005025008      WRITES COLUMN ADDITION EQUATIONS USING DECIMAL NOTATION.

0005025009      SOLVES COLUMN ADDITION EQUATIONS USING DECIMAL NOTATION.

0005025010      FIND THE SUM OF FIVE OR FEWER DECIMALS.

0005025011      FIND THE DIFFERENCE OF TWO DECIMALS.

0005025012      USES  LESS THAN, GREATER THAN, = TO DISTINGUISH           INEQUALITIES

0005025013      SOLVE WORD PROBLEMS INVOLVING ADDITION AND/OR            SUBTRACTION O

0005025014      RECOGNIZE THE PLACE VALUE OF EACH DIGIT IN A DECIMAL     THROUGH THOUS

0005025015      EXPRESS MEASUREMENTS IN DECIMAL NOTATION.
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IMAL NOTATION FOR TENTHS, HUNDREDTHS, AND THOUSANDTHS.

ORS OF 10, 100, 1000 AS DECIMALS.

, HUNDREDTHS, OR THOUSANDTHS AS FRACTIONS.

CIMAL NOTATION FOR TENTHS, HUNDREDTHS, AND THOUSANDTHS.

USING DECIMAL NOTATION.

USING DECIMAL NOTATION.

CIMALS.

ALS.

TO DISTINGUISH INEQUALITIES USING DECIMAL NOTATION.

DITION AND/OR SUBTRACTION OF DECIMALS.

H DIGIT IN A DECIMAL THROUGH THOUSANDS.

NOTATION.

| | | |
|---|---|---|
| 0005030 | DIVISION | |
| 0005030001 | IDENTIFY THE DIVISOR, DIVIDEND, QUOTIENT, AND REMAINDER | IN A DIVI |
| 0005030002 | DIVIDE A 1,2,3,4, DIGIT NUMBER BY A 1 DIGIT NUMBER. | |
| 0005030003 | GIVEN A 2 DIGIT DIVISOR, EXPRESS IT TO THE NEARER | MULTIPLE |
| 0005030004 | USES DIVISION ALGORITHM TO SOLVE EQUATIONS INVOLVING WITHOUT REMAINDERS. | TWO-DIGIT |
| 0005030005 | GIVEN A WORD PROBLEM REQUIRING THE OPERATION OF | DIVISION, |
| 0005030006 | GIVEN A TWO-STEP WORD PROBLEM INVOLVING WHOLE NUMBERS, | WRITE THE |
| 0005030007 | DEMONSTRATE AN UNDERSTANDING OF THE FUNCTION OF 0 IN | DIVISION. |
| 0005030008 | DEMONSTRATE AN UNDERSTANDING OF THE DIVISION PROCESS | THROUGH T |
| 0005035 | ESTIMATION | |
| 0005035001 | ESTIMATE DISTANCES TO THE NEAREST UNIT. | |
| 0005035002 | GIVEN A NUMBER TO MILLIONS, EXPRESS IT TO THE NEAREST | 10, 100, |
| 0005035003 | ESTIMATE THE ANSWER TO AN ADDITION OR SUBTRACTION MINUEND TO THE NEAREST TEN, 100, 1000. | PROBLEM B |
| 0005035004 | ROUNDS NUMBERS TO MILLIONS IN ESTIMATING SUMS. | |
| 0005035005 | STUDENT ROUNDS NUMBERS TO MILLIONS IN ESTIMATING | DIFFERENC |

DEND, QUOTIENT, AND REMAINDER IN A DIVISION PROBLEM.

MBER BY A 1 DIGIT NUMBER.

XPRESS IT TO THE NEARER MULTIPLE OF 10 AND ESTIMATE THE QUOTIENT.

SOLVE EQUATIONS INVOLVING TWO-DIGIT DIVISORS AND MULT -DIGITED QUOTIENTS WITH AND

RING THE OPERATION OF DIVISION, WRITE THE EQUATION AND FIND THE SOLUTION.

LEM INVOLVING WHOLE NUMBERS, WRITE THE EQUATION AND FIND THE SOLUTION.

G OF THE FUNCTION OF 0 IN DIVISION.

G OF THE DIVISION PROCESS THROUGH THE USE OF EXPANDED NOTATION.

EAREST UNIT.

EXPRESS IT TO THE NEAREST 10, 100, 1000.

DDITION OR SUBTRACTION PROBLEM BY ROUNDING THE ADDENDS OR SUBTRAHEND AND
100, 1000.

IN ESTIMATING SUMS.

ILLIONS IN ESTIMATING DIFFERENCES.

0005040 EXPONENTIAL NOTATION

0005040001 USE SIMPLE EXPONENTS.

0005045 FRACTIONS

0005045001 IDENTIFIES FRACTIONS RELATED TO SETS.

0005045002 IDENTIFIES FRACTIONS RELATED TO PARTS OF REGIONS.

0005045003 IDENTIFIES FRACTIONS RELATED TO ORDERED PAIRS.

0005045004 WRITE SENTENCES USING FRACTIONS TO REPRESENT PHYSICAL SITUATIONS.

0005045005 RECOGNIZE THE NUMERATOR AND THE DENOMINATOR IN A GIVEN FRACTION.

0005045006 FIND THE SUM OF TWO OR MORE PROPER FRACTIONS WITH LIKE DENOMINATORS.

0005045007 FIND THE DIFFERENCE OF TWO PROPER FRACTIONS WITH LIKE DENOMINATORS.

0005045008 BUILDS SETS OF EQUIVALENT FRACTIONS (MULTIPLIES BOTH NUMERATOR AND SAME NUMBER, INCREASING THE NUMBER BY ONE EACH TIME).

0005045009 FINDS GREATEST COMMON FACTOR FOR A SET OF NUMBERS.

0005045010 USES GREATEST COMMON FACTOR FOR A SET OF NUMBERS TO REDUCE FRACTIO

0005045011 FINDS THE LOWEST TERMS FRACTION WHEN GIVEN A SET OF EQUIVALENT FRA

0005045012 GIVEN A FRACTION RECOGNIZE WHETHER IT IS IN LOWEST TERMS. IF NOT

SETS.

PARTS OF REGIONS.

ORDERED PAIRS.

TO REPRESENT PHYSICAL SITUATIONS.

DENOMINATOR IN A GIVEN FRACTION.

PER FRACTIONS WITH LIKE DENOMINATORS.

ER FRACTIONS WITH LIKE DENOMINATORS.

IONS (MULTIPLIES BOTH NUMERATOR AND DENOMINATOR OF A GIVEN FRACTION BY THE BER BY ONE EACH TIME).

R A SET OF NUMBERS.

A SET OF NUMBERS TO REDUCE FRACTIONS TO LOWEST TERMS.

WHEN GIVEN A SET OF EQUIVALENT FRACTIONS.

HER IT IS IN LOWEST TERMS. IF NOT, EXPRESS THE FRACTION IN LOWEST TERMS.

| | | |
|---|---|---|
| 0005045013 | SOLVES ADDITION EQUATIONS INVOLVING LIKE AND UNLIKE | FRACTIONS. |
| 0005045014 | RECOGNIZE THAT ZERO IS THE IDENTITY ELEMENT FOR WELL AS IN THE SET OF WHOLE NUMBERS. | ADDITION I |
| 0005045015 | GIVEN A PICTURE OR DIAGRAM WHICH IS SHADED TO SHOW A SHADING. | MIXED NUMB |
| 0005045016 | IDENTIFIES AN IMPROPER FRACTION. | |
| 0005045017 | GIVEN AN IMPROPER FRACTION, EXPRESS IT AS A MIXED | NUMBER, TH |
| 0005045018 | GIVEN AN IMPROPER FRACTION, EXPRESS IT AS A MIXED IMPROPER FRACTION. | NUMBER, OR |
| 0005045019 | FIND THE SUM OF A WHOLE NUMBER AND A FRACTION, OR A | WHOLE NUMB |
| 0005045020 | FIND THE SUM OF TWO OR THREE MIXED NUMBERS WITH LIKE | DENOMINATO |
| 0005045021 | SOLVES ADDITION EQUATIONS INVOLVING MIXED NUMBERS. | |
| 0005045022 | SUBTRACT A FRACTION OR A MIXED NUMBER FROM A WHOLE | NUMBER AND |
| 0005045023 | SOLVES SUBTRACTION EQUATIONS INVOLVING MIXED NUMBERS. | |
| 0005045024 | FIND THE DIFFERENCE OF TWO MIXED NUMBERS WITH LIKE | DENOMINATO |
| 0005045025 | GIVEN A ONE-STEP WORD PROBLEM REQUIRING ADDITION OF LOWEST TERMS. | FRACTIONS, |
| 0005045026 | GIVEN A ONE STEP WORD PROBLEM REQUIRING SUBTRACTION OF LOWEST TERMS. | FRACTIONS, |

NVOLVING LIKE AND UNLIKE FRACTIONS.

DENTITY ELEMENT FOR ADDITION IN THE SET OF POSITIVE RATIONAL NUMBERS AS NUMBERS.

WHICH IS SHADED TO SHOW A MIXED NUMBER, RECOGNIZE THE MIXED NUMBER SHOWN BY THE

TION.

EXPRESS IT AS A MIXED NUMBER, THE FRACTIONAL PART OF WHICH IS IN LOWEST TENS.

EXPRESS IT AS A MIXED NUMBER, OR GIVEN A MIXED NUMBER, EXPRESS IT AS AN

ER AND A FRACTION, OR A WHOLE NUMBER AND A MIXED NUMBER.

MIXED NUMBERS WITH LIKE DENOMINATORS AND EXPRESS THE ANSWER IN LOWEST TERMS.

NVOLVING MIXED NUMBERS.

ED NUMBER FROM A WHOLE NUMBER AND WRITE THE ANSWER IN LOWEST TERMS.

INVOLVING MIXED NUMBERS.

IXED NUMBERS WITH LIKE DENOMINATORS AND WRITE THE ANSWER IN LOWEST TERMS.

M REQUIRING ADDITION OF FRACTIONS, WRITE THE EQUATION AND FIND THE ANSWER IN

M REQUIRING SUBTRACTION OF FRACTIONS, WRITE THE EQUATION AND EXPRESS THE ANSWER IN

0005045027 GIVEN A TWO STEP WORD PROBLEM INVOLVING ADDITION AND/OR SUBTRACTION O
THE ANSWER IN LOWEST TERMS.

0005050 GEOMETRY (COORDINATE SYSTEMS)

0005050001 GRAPHS SETS OF POINTS ON A NUMBER LINE. WHOLE NUMBERS AND RATIONAL

0005050002 GRAPHS NEGATIVE INTEGERS ON A NUMBER LINE.

0005050003 GRAPHS NEGATIVE INTEGERS ON A COORDINATE AXIS.

0005055 GEOMETRY (PLANE FIGURES) - ANGLES -

0005055001 MEASURES ANGLES. USES UNIT ANGLE, COMPASS AND PROTRACTOR.

0005055002 RECOGNIZE THAT A RIGHT ANGLE HAS THE MEASURE 90 DEGREES.

0005055003 RECOGNIZE ACUTE, RIGHT, AND OBTUSE ANGLES.

0005060 GEOMETRY (PLANE FIGURES) - CIRCLE -

0005060001 RECOGNIZE THE RADIUS AND DIAMETER OF A CIRCLE.

0005060002 FINDS PERIMETER (CIRCUMFERENCE) OF A CIRCLE.

VOLVING ADDITION AND/OR SUBTRACTION OF FRACTIONS, WRITE THE EQUATION AND EXPRES

ER LINE. WHOLE NUMBERS AND RATIONAL NUMBERS.

UMBER LINE.

OORDINATE AXIS.

ES -

LE, COMPASS AND PROTRACTOR.

S THE MEASURE 90 DEGREES.

USE ANGLES.

LE -

ER OF A CIRCLE.

OF A CIRCLE.

0005065 GEOMETRY (PLANE FIGURES) - CONGRUENCE -

0005065001 IDENTIFIES CONGRUENT SEGMENTS.

0005065002 GIVEN SETS OF ANGLES THE STUDENT WILL MEASURE WITH A PROTRACTOR

0005065003 RECOGNIZE THAT TRIANGLES ARE CONGRUENT IF CORRESPONDING SIDES ARE CONGRUENT.

0005070 GEOMETRY (PLANE FIGURES) - CONSTRUCTIONS -

0005070001 CONSTRUCTS A COPY OF A CIRCLE, SEGMENT.

0005070002 BISECT AN ANGLE. (STUDENTS MAY DISCOVER SEVERAL DIFFERENT

0005070003 BISECTS AN ANGLE, SEGMENT.

0005070004 RECONSTRUCT AN ANGLE AND A TRIANGLE BY USING A COMPASS AND A STRA

0005080 GEOMETRY (PLANE FIGURES) - LINES -

0005080001 RECOGNIZE PERPENDICULAR LINES.

0005080002 IDENTIFIES PERPENDICULAR LINES.

0005090 GEOMETRY (PLANE FIGURES) - POLYGONS -

0005090001 GIVEN A DRAWING OR A DESCRIPTION OF ANY POLYGON WITH NO MORE THAN

TS.

UDENT WILL MEASURE WITH A PROTRACTOR TO FIND THOSE THAT ARE CONGRUENT.

E CONGRUENT IF CORRESPONDING SIDES ARE CONGRUENT AND CORRESPONDING ANGLES ARE

CONSTRUCTIONS -

LE, SEGMENT.

MAY DISCOVER SEVERAL DIFFERENT CONSTRUCTIONS).

TRIANGLE BY USING A COMPASS AND A STRAIGHTEDGE.

LINES -

ES.

NES.

POLYGONS -

PTION OF ANY POLYGON WITH NO MORE THAN FOUR SIDES, IDENTIFY THE POLYGON.

0005090002 FIND THE PERIMETER OF ANY POLYGON WHEN GIVEN THE MEASURE OF EACH OF ITS

0005090003 FIND THE AREA OF A PLANE REGION, SUCH AS RECTANGLES.

0005095 GEOMETRY (PLANE FIGURES) - QUADRILATERALS -

0005095001 FINDS AREA, USING STANDARD FORMULA OF RECTANGLES AND PARALLELOGRAMS

0005095002 USES PARALLEL AND PERPENDICULAR LINES TO CONSTRUCT QUADRILATERALS

0005110 GEOMETRY (PLANE FIGURES) - SYMBOLS AND NOTATION -

0005110001 RECOGNIZES STANDARD GEOMETRIC NOTATION FOR POINTS, SEGMENTS, RAYS

0005110002 USES ANGLE NOTATION (LESS THAN) TO DETERMINE CONGRUENCY FOR ANGLES.

0005115 GEOMETRY (PLANE FIGURES) - SYMMETRY -

0005115001 RECOGNIZE SYMMETRY WITH RESPECT TO A POINT BY FOLDING A PAPER ALONG A FIGURE (CIRCLE, SQUARE).

0005125 GEOMETRY (PLANE FIGURES) - TRIANGLE -

0005125001 DEMONSTRATE THAT THE SUM OF THE MEASURES OF THE ANGLES OF A TRIANGLE CORNERS OF A TRIANGULAR PIECE OF PAPER.

0005125002 FINDS AREA OF TRIANGLE WHEN GIVEN BASE AND HEIGHT.

ON WHEN GIVEN THE MEASURE OF EACH OF ITS SIDES.

SUCH AS RECTANGLES.

RILATERALS -

ULA OF RECTANGLES AND PARALLELOGRAMS.

LINES TO CONSTRUCT QUADRILATERALS.

CLS AND NOTATION -

UTATION FOR POINTS, SEGMENTS, RAYS, LINES.

TO DETERMINE CONGRUENCY FOR ANGLES.

ETRY -

TO A POINT BY FOLDING A PAPER ALONG A LINE THROUGH A CENTER OF SUCH A GEOMETRIC

NGLE -

MEASURES OF THE ANGLES OF A TRIANGLE IS 180 DEGREES BY TEARING OFF AND MATCHIN(
F PAPER.

EN BASE AND HEIGHT.

0005125003 COMPUTE THE AREA OF A TRIANGLE.

0005130 GEOMETRY (SIZE AND SHAPE)

0005130001 USES NOTATION FOR CONGRUENCY.

0005130002 DEMONSTRATE UNDERSTANDING OF GEOMETRIC NOTATION BY USING THE S
SUCH AS SEGMENTS, LINES, ANGLES, RAYS.

0005130003 DEMONSTRATE UNDERSTANDING OF GEOMETRIC NOTATION AND CONGRUENCY
GEOMETRIC OBJECTS.

0005135 GEOMETRY (SOLIDS)

0005135001 COMPUTE THE SURFACE AREA OF A RECTANGULAR BOX.

0005135002 FINDS SURFACE AREA FOR CUBIC FIGURE.

0005135003 RECOGNIZE INFORMAL CONCEPTS OF VOLUME; FOR EXAMPLE A BOX WITH DIMENS
CONTAINS 24 ONE-INCH CUBES.

0005135004 FINDS VOLUME FOR CUBIC FIGURE USING STANDARD FORMULA.

0005135005 RECOGNIZE COMMON POLYHEDRA SUCH AS TETRAHEDRON, A CUBE, A RECTANGUL

0005135006 IDENTIFY FACES, EDGES, VERTICES, AND DIAGONALS OF COMMON POLY

0005135007 DEMONSTRATE AN UNDERSTANDING OF VARIOUS POLYHEDRA BY MAKING APPR

0005135008 USE EULER'S FORMULA, NAMELY V + F = E + 2 WHERE V IS THE NUMBER OF V
THE NUMBER OF EDGES OF ANY POLYHEDRON.

LE.

GEOMETRIC NOTATION BY USING THE SYMBOLS FOR THE ABSTRACT GEOMETRIC OBJECTS,
LES, RAYS.

GEOMETRIC NOTATION AND CONGRUENCY BY WRITING THE SYMBOLS FOR PAIRS OF CONGRUENT

A RECTANGULAR BOX.

FIGURE.

OF VOLUME; FOR EXAMPLE A BOX WITH DIMENSIONS 2 INCHES BY 3 INCHES BY 4 INCHES

E USING STANDARD FORMULA.

UCH AS TETRAHEDRON, A CUBE, A RECTANGULAR PRISM.

CES, AND DIAGONALS OF COMMON POLYHEDRA.

OF VARIOUS POLYHEDRA BY MAKING APPROPRIATE PAPER MODELS.

V + F = E + 2 WHERE V IS THE NUMBER OF VERTICES, F IS THE NUMBER OF FACES, AND E IS
YHEDRON.

| | |
|---|---|
| 0005140 | GEOMETRY (SPACE RELATIONSHIPS) |
| 0005140001 | RECOGNIZE THAT A PLANE IS DETERMINED BY THREE POINTS NOT ALL ON ONE LI |
| 0005140002 | RECOGNIZE PARALLEL PLANES. |
| 0005145 | GRAPHS |
| 0005145001 | CONSTRUCT SIMPLE PICTURE GRAPHS. |
| 0005145002 | CONSTRUCT SIMPLE LINE GRAPHS. |
| 0005145003 | CONSTRUCT SIMPLE BAR GRAPHS. |
| 0005150 | INVERSE (ADDITIVE) |
| 0005150001 | APPLY THE CONCEPT OF THE INVERSE RELATIONSHIPS OF ADDITION AND S |
| 0005155 | INVERSE (MULTIPLICATIVE) |
| 0005155001 | APPLIES THE CONCEPT OF INVERSE RELATIONSHIP OF MULTIPLICATION |
| 0005180 | MEASUREMENT (LINEAR) |
| 0005180001 | EXPRESS LINEAR MEASURES OF INCHES AS FEET, INCHES AS YARDS, FEET AS |
| 0005180002 | FIND THE SUM OF THREE LIKE LINEAR ENGLISH MEASURES EXPRESS ANSWER |

INED BY THREE POINTS NOT ALL ON ONE LINE.

RELATIONSHIPS OF ADDITION AND SUBTRACTION.

RELATIONSHIP OF MULTIPLICATION AND DIVISION.

S AS FEET, INCHES AS YARDS, FEET AS YARDS AND FEET AS MILES, AND VICE VERSA.

R ENGLISH MEASURES EXPRESS ANSWER IN SIMPLEST FORM.

| | | |
|---|---|---|
| 0005180003 | GIVEN A RULER WITH 16 DIVISIONS TO THE INCH, MEASURE A | GIVEN LIN |
| 0005180004 | USING A TABLE OF METRIC MEASURES, EXPRESS LINEAR DECIMETERS, DECIMETERS AS METERS, CENTIMETERS AS METERS, | MEASURES AND METER |
| 0005180005 | RECOGNIZE THE SIMILARITY OF MAPS MADE WITH DIFFERENT | SCALES. |
| 0005185 | MEASUREMENT (LIQUID) | |
| 0005185001 | USING A TABLE OF LIQUID MEASURES, EXPRESS CUPS AS PINTS, FLUID OUNCES AS CUPS, AND FLUID OUNCES AS PINTS, AND | CUPS AS Q VICE VERS |
| 0005185002 | ADD OR SUBTRACT LIQUID MEASURES, EXPRESSING ANSWERS IN | SIMPLEST |
| 0005195 | MEASUREMENT (RATE) | |
| 0005195001 | DEMONSTRATE UNDERSTANDING OF RATE CONCEPT, BY APPLYING | EQUATIONS |
| 0005200 | MEASUREMENT (RELATIVE) | |
| 0005200001 | RECOGNIZE THAT ALL MEASUREMENT INVOLVES APPROXIMATION. | |
| 0005210 | MEASUREMENT (TIME) | |
| 0005210001 | ADD OR SUBTRACT MEASURES OF TIME (CENTURIES, YEARS, | MINUTES, |
| 0005210002 | ADDS UNITS OF TIME EXTENDING. | |

ONS TO THE INCH, MEASURE A GIVEN LINE SEGMENT TO THE NEAREST EIGHTH OF AN INCH.

URES, EXPRESS LINEAR MEASURES OF MILLIMETERS AS CENTIMETERS, CENTIMETERS AS
TERS, CENTIMETERS AS METERS, AND METERS AS KILOMETERS, AND VICE VERSA.

MAPS MADE WITH DIFFERENT SCALES.

URES, EXPRESS CUPS AS PINTS, CUPS AS QUARTS, QUARTS AS GALLONS, PINTS AS QUARTS,
UID OUNCES AS PINTS, AND VICE VERSA.

RES, EXPRESSING ANSWERS IN SIMPLEST FORM.

RATE CONCEPT, BY APPLYING EQUATIONS IN WRITTEN EXERCISES.

NT INVOLVES APPROXIMATION.

TIME (CENTURIES, YEARS, MINUTES, ETC,) EXPRESSING ANSWERS IN SIMPLEST FORM.

0005210003 SUBTRACTS UNITS OF TIME EXTENDING.

0005210004 DEMONSTRATE UNDERSTANDING OF TIME CONCEPT BY APPLYING EQUATIONS IN W

0005215 MEASUREMENT (VOLUME)

0005215001 RELATES LIQUID MEASURE TO CUBIC MEASURE.

0005220 MULTIPLICATION

0005220001 IDENTIFY THE FACTORS AND THE PRODUCT IN A MULTIPLICATION PROBLEM.

0005220002 FIND THE MISSING FACTOR IN A MULTIPLICATION PROBLEM.

0005220003 DEMONSTRATE A WORKING KNOWLEDGE OF THE BASIC FACTS, OPERATIONS AND

0005220004 FIND THE PRODUCT OF A 1-DIGIT NUMBER AND A 2,3,4, DIGIT NUMBER.

0005220005 FIND THE PRODUCT OF A 1-DIGIT NUMBER AND A MULTIPLE OF 10 OR 100.

0005220006 FIND THE PRODUCT OF TWO 2-DIGIT NUMBERS WHEN BOTH FACTORS ARE MU

0005220007 FIND THE PRODUCT OF TWO 2-DIGIT NUMBERS.

0005220008 FIND THE PRODUCT OF A 2-DIGIT NUMBER AND A 3,4, DIGIT NUMBER.

0005220009 GIVEN A ONE-STEP WORD PROBLEM REQUIRING THE OPERATION OF MULTIPLICAT
ANSWER (ONE DIGIT MULTIPLIER).

NG.

ME CONCEPT BY APPLYING EQUATIONS IN WRITTEN EXERCISES.

MEASURE.

DUCT IN A MULTIPLICATION PROBLEM.

LTIPLICATION PROBLEM.

OF THE BASIC FACTS. OPERATIONS AND FUNCTIONS OF MULTIPLICATION.

UMBER AND A 2,3,4, DIGIT NUMBER.

UMBER AND A MULTIPLE OF 10 OR 100.

NUMBERS WHEN BOTH FACTORS ARE MULTIPLES OF 10.

NUMBERS.

MBER AND A 3,4, DIGIT NUMBER.

QUIRING THE OPERATION OF MULTIPLICATION, WRITE THE EQUATION AND FIND THE

0005220010 GIVEN A TWO STEP WORD PROBLEM REQUIRING MULTIPLICATION AND ADDIT
THE ANSWER.

0005220011 GIVEN A WORD PROBLEM REQUIRING MULTIPLICATION, WRITE THE EQUATION

0005220012 SOLVE MULTIPLICATION PROBLEMS USING THE DISTRIBUTIVE PROPERTY

0005230 NUMBER SYSTEMS (EARLY)

0005230001 RECOGNIZES OTHER NUMBER SYSTEMS - GREEK, EGYPTIAN, EAST ARABIC.

0005230002 READ ROMAN NUMERALS.

0005230003 WRITE ROMAN NUMERALS.

0005230004 STUDENT WILL READ DATES IN ROMAN NUMERALS.

0005230005 GIVES ROMAN NUMERAL FOR A BASE 10 NUMERAL.

0005235 NUMBERS (INTEGERS)

0005235001 USE THE NUMBER LINE TO REPRESENT POSITIVE RATIONAL INTEGERS.

0005235002 USE THE NUMBER LINE TO REPRESENT NEGATIVE INTEGERS.

0005235003 RECOGNIZES NEGATIVE INTEGERS.

0005235004 EXPRESS THE QUOTIENT OF INTEGERS AS A MIXED NUMBER; FOR EXAMPLE,

LEM REQUIRING MULTIPLICATION AND ADDITION OR SUBTRACTION, WRITE THE EQUATION AND FIND

RING MULTIPLICATION, WRITE THE EQUATION AND FIND THE ANSWER.

EMS USING THE DISTRIBUTIVE PROPERTY OF MULTIPLICATION OVER ADDITION.

STEMS - GREEK, EGYPTIAN, EAST ARABIC.

ROMAN NUMERALS.

BASE 10 NUMERAL.

RESENT POSITIVE RATIONAL INTEGERS.

RESENT NEGATIVE INTEGERS.

RS.

TEGERS AS A MIXED NUMBER: FOR EXAMPLE, 24 DIVIDED BY 5 = 4 4/5.

0005240 NUMBERS (PRIME - COMPOSITE)

0005240001 IDENTIFY COMPOSITE NUMBERS.

0005240002 GIVES COMPLETE FACTORIZATION OF A COMPOSITE NUMBER.

0005240003 USES INTERSECTION TO FIND COMMON MULTIPLES OF NUMBERS.

0005240004 STUDENT NAMES COMMON FACTORS OF NUMBERS.

0005240005 DETERMINES LEAST COMMON MULTIPLE OF NUMBERS.

0005240006 IDENTIFY PRIME NUMBERS SUCH AS 2, 3, 5, 7, 11, 13, 17.

0005240007 STUDENT DESIGNATES THE PRIME FACTORS OF NUMBERS.

0005240008 FIND THE PRIME FACTORS OF NUMBERS THROUGH 100.

0005240009 GIVEN ANY TWO WHOLE NUMBERS, FIND THEIR GREATEST COMMON FACTOR.

0005240010 GIVEN ANY WHOLE NUMBER, RECOGNIZE WHETHER IT IS PRIME OR COMPOSITE.

0005245 NUMBERS (RATIONAL AND IRRATIONAL)

0005245001 RECOGNIZES THAT EACH SET OF EQUIVALENT FRACTIONS IS ASSOCIATED WIT

0005245002 WRITE MANY NAMES FOR THE SAME RATIONAL NUMBER.

0005245003 FIND MANY WAYS TO EXPRESS A RATIONAL NUMBER.

F A COMPOSITE NUMBER.

ON MULTIPLES OF NUMBERS.

F NUMBERS.

LE OF NUMBERS.

2, 3, 5, 7, 11, 13, 17.

ACTORS OF NUMBERS.

ERS THROUGH 100.

IND THEIR GREATEST COMMON FACTOR.

IZE WHETHER IT IS PRIME OR COMPOSITE.

AL)

UIVALENT FRACTIONS IS ASSOCIATED WITH ONE RATIONAL NUMBER.

RATIONAL NUMBER.

TIONAL NUMBER.

0005245004 DETERMINES INEQUALITITES FOR RATIONAL NUMBERS.

0005245005 ADD SIMPLE RATIONAL NUMBERS BY USE OF PHYSICAL OBJECTS, DIAGRAMS,

0005245006 ADD RATIONAL NUMBERS.

0005245007 DEMONSTRATE KNOWLEDGE THAT A WHOLE NUMBER IS ALSO A MIXED NUMB

0005245008 USE DIFFERENT TECHNIQUES FOR FINDING THE SUM OF TWO RATIONAL N

0005245009 USE THE COMMUTATIVE PROPERTIES FOR ADDITION IN THE SET OF POSITIV

0005245010 USE THE ASSOCIATIVE PROPERTY FOR ADDITION IN THE SET OF POSITIVE R

0005245011 DETERMINE GREATER THAN, LESS THAN, AND BETWEENNESS FOR RATIONAL N

0005245012 IDENTIFY THE LARGER RATIONAL NUMBER OF TWO BEING COMPARED.

0005245013 RECOGNIZE THE SET OF POSITIVE RATIONAL NUMBERS (FRACTIONS

0005245015 RECOGNIZE THAT THERE IS NO SMALLEST POSITIVE RATIONAL NUMBER.

0005245016 SUBTRACT SIMPLE RATIONAL NUMBERS BY USE OF PHYSICAL OBJECTS, D

0005245017 SUBTRACT RATIONAL NUMBERS.

0005245018 RECOGNIZE THAT SUBRRACTION IS NOT ALWAYS POSSIBLE IN THE SET OF POS

R RATIONAL NUMBERS.

BY USE OF PHYSICAL OBJECTS, DIAGRAMS, ETC.

A WHOLE NUMBER IS ALSO A MIXED NUMBER.

R FINDING THE SUM OF TWO RATIONAL NUMBERS.

IES FOR ADDITION IN THE SET OF POSITIVE RATIONAL NUMBERS.

Y FOR ADDITION IN THE SET OF POSITIVE RATIONAL NUMBERS.

S THAN, AND BETWEENNESS FOR RATIONAL NUMBERS.

L NUMBER OF TWO BEING COMPARED.

VE RATIONAL NUMBERS (FRACTIONS) AS AN EXTENSION OF THE SET OF WHOLE NUMBERS.

SMALLEST POSITIVE RATIONAL NUMBER.

MBERS BY USE OF PHYSICAL OBJECTS, DIAGRAMS, ETC.

IS NOT ALWAYS POSSIBLE IN THE SET OF POSITIVE RATIONAL NUMBERS.

| | | |
|---|---|---|
| 0005245019 | MULTIPLY SIMPLE RATIONAL NUMBERS BY USE OF PHYSICAL | OBJECTS, DIAG |
| 0005245020 | IDENTIFY PROPERTIES OF RATIONAL NUMBERS UNDER | MULTIPLICATIO |
| 0005245021 | STUDENT WILL ILLUSTRATE PROPERTIES OF RATIONAL NUMBERS | UNDER MULTIPL |
| 0005245022 | ILLUSTRATE PROPERTIES OF RATIONAL NUMBERS UNDER | DIVISION. |
| 0005250 | NUMBERS (WHOLE) | |
| 0005250001 | RECOGNIZE THAT SUBTRACTION IS NOT ALWAYS POSSIBLE IN THE SET OF WHOLE | |
| 0005255 | NUMERALS | |
| 0005255001 | COUNTS BEYOND BILLIONS. | |
| 0005255002 | READS BEYOND BILLIONS. | |
| 0005255003 | WRITES BEYOND BILLIONS. | |
| 0005270 | PLACE VALUE | |
| 0005270001 | IDENTIFIES LARGER OR SMALLER NUMBER IN A GIVEN AND EXPANDED NOTATION. | COMPARISON OF |
| 0005270002 | RECOGNIZE THE PLACE VALUE OF EACH DIGIT OF A NUMBER TO | THE MILLIONS P |

S BY USE OF PHYSICAL OBJECTS, DIAGRAMS, ETC.

NUMBERS UNDER MULTIPLICATION.

IES OF RATIONAL NUMBERS UNDER MULTIPLICATION.

AL NUMBERS UNDER DIVISION.

OT ALWAYS POSSIBLE IN THE SET OF WHOLE NUMBERS.

BER IN A GIVEN COMPARISON OF NUMBERS BY USING KNOWLEDGE OF PLACE VALUE

H DIGIT OF A NUMBER TO THE MILLIONS PLACE.

| | | |
|---|---|---|
| 0005270003 | WRITE A GIVEN NUMERAL TO MILLIONS IN EXPANDED FORM AND | GIVEN A N |
| 0005270004 | GIVEN A NUMERAL TO HUNDRED MILLIONS, EXPRESS IT ORALLY<br>NUMBER TO HUNDRED MILLIONS, EXPRESS IT ORALLY AND WRITE | AND WRITE<br>IT AS A N |
| 0005285 | RATIO | |
| 0005285001 | FIND THE MISSING TERM IN A PROPORTION SUCH AS 2/5 = X/9 | BY USING |
| 0005285002 | USE MEMBERS OF SETS OF EQUIVALENT RATIOS WITH THE SAME<br>RATIOS. | FIRST TER |
| 0005285003 | USE THE IDEAS OF RATIO AND EQUIVALENT RATIO WITH | PROBLEMS |
| 0005295 | SETS | |
| 0005295001 | RECOGNIZE ALL THE SUBSETS OF A SET. | |
| 0005295002 | IDENTIFY AND TELL THE DIFFERENCE BETWEEN EQUAL SETS AND | EQUIVALEN |
| 0005295003 | DESCRIBE THE SET WHICH IS THE UNION OF TWO SETS. | |
| 0005295004 | DESCRIBE THE SET WHICH IS THE INTERSECTION OF TWO SETS. | |
| 0005295005 | GIVEN A DESCRIPTION OF SET, INCLUDING EMPTY SET, WRITE | ITS ELEME |
| 0005295006 | GIVEN A SET AND AN OPERATION, THE STUDENT WILL IDENTIFY | THE SET A |

| | |
|---|---|
| LIONS IN EXPANDED FORM AND | GIVEN A NUMBER IN EXPANDED FORM, WRITE THE NUMERAL. |
| ILLIONS, EXPRESS IT ORALLY<br>EXPRESS IT ORALLY AND WRITE | AND WRITE IT IN WORD FORM, AND GIVEN THE WORD FORM OF A<br>IT AS A NUMERAL. |
| | |
| PROPORTION SUCH AS 2/5 = X/9 | BY USING THE CROSS MULTIPLICATION PROPERTY. |
| ALENT RATIOS WITH THE SAME | FIRST TERM OR THE SAME SECOND TERM TO COMPARE DIFFERENT |
| QUIVALENT RATIO WITH | PROBLEMS THAT INCLUDE FRACTIONS AS TERMS. |
| | |
| A SET. | |
| RENCE BETWEEN EQUAL SETS AND | EQUIVALENT SETS. |
| E UNION OF TWO SETS. | |
| E INTERSECTION OF TWO SETS. | |
| INCLUDING EMPTY SET, WRITE | ITS ELEMENTS USING SET NOTATION. |
| , THE STUDENT WILL IDENTIFY | THE SET AS BEING CLOSED OR OPEN UNDER THAT OPERATION. |

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|---|---|---|
| 0005315 | SUBTRACTION | |
| 0005315001 | DEMONSTRATE A WORKING KNOWLEDGE OF THE BASIC SUBTRACTION FACTS, OPERAT | |
| 0005315002 | STUDENT REGROUPS TO SOLVE MULTI-DIGIT SUBTRACTION | PROBLEMS. |
| 0005315003 | FIND THE DIFFERENCE BETWEEN 2 NUMBERS, NEITHER OF WHICH | HAS MORE THAN |
| 0005315004 | WRITE AN EQUATION FOR A WORD PROBLEM INVOLVING | SUBTRACTION, |
| 0005315005 | SOLVES ANY GIVEN SUBTRACTION EQUATION INVOLVING WHOLE | NUMBERS USING |
| 0005325 | VALUE OF COINS | |
| 0005325001 | MULTIPLIES MONEY VALUES USING DOLLARS AND DECIMAL | NOTATION. |
| 0005325002 | DIVIDES MONEY VALUES USING DOLLAR AND DECIMAL NOTATION. | |

OF THE BASIC SUBTRACTION FACTS, OPERATIONS AND FUNCTIONS.

DIGIT SUBTRACTION PROBLEMS.

MBERS, NEITHER OF WHICH HAS MORE THAN 4 DIGITS.

BLEM INVOLVING SUBTRACTION, AND FIND THE ANSWER.

ATION INVOLVING WHOLE NUMBERS USING THE SUBTRACTION ALGORITHM.

LLARS AND DECIMAL NOTATION.

R AND DECIMAL NOTATION.

| | | |
|---|---|---|
| 0006005 | ADDITION | |
| 0006005001 | FIND THE MISSING ADDEND IN AN INCOMPLETE ADDITION | SENTENCE. |
| 0006005002 | ADD NUMBERS WITH 3 OR MORE DIGITS. | |
| 0006015 | BASES | |
| 0006015001 | COUNT IN BASE 2, 3, 4, 5, 6, 7, 8, 9. | |
| 0006015002 | GIVEN A BASE TEN NUMBER, EXPRESS IT AS A NUMBER IN A | BASE LESS |
| 0006015003 | GIVEN A NUMBER IN A BASE LESS THAN 10, EXPRESS IT AS A | BASE TEN |
| 0006025 | DECIMALS | |
| 0006025001 | WRITE SENTENCES USING DECIMAL NUMERALS TO REPRESENT | PHYSICAL |
| 0006025002 | STUDENT READS RATIONALS IN DECIMAL FORM. | |
| 0006025003 | WRITES RATIONALS IN DECIMAL FORM. | |
| 0006025004 | DEMONSTRATE AN UNDERSTANDING OF THE RELATIONSHIP | BETWEEN D |
| 0006025005 | EXPRESS A GIVEN DECIMAL TO THE NEAREST WHOLE NUMBER | 10, 100, |
| 0006025006 | STUDENT SOLVES ADDITION PROBLEMS WITH RATIONALS IN | DECIMAL F |
| 0006025007 | ADD DECIMALS THROUGH 100,000. | |

AN INCOMPLETE ADDITION SENTENCE.

DIGITS.

, 7, 8, 9.

PRESS IT AS A NUMBER IN A BASE LESS THAN TEN.

SS THAN 10, EXPRESS IT AS A BASE TEN NUMBER.

AL NUMERALS TO REPRESENT PHYSICAL SITUATIONS.

DECIMAL FORM.

FORM.

G OF THE RELATIONSHIP BETWEEN DECIMALS AND COMMON FRACTIONS.

THE NEAREST WHOLE NUMBER 10, 100, OR 1000.

BLEMS WITH RATIONALS IN DECIMAL FORM.

0.

0006025008 STUDENT SOLVES SUBTRACTION PROBLEMS WITH RATIONALS IN DECIMAL FORM.

0006025009 SUBTRACT DECIMALS THROUGH 100,000.

0006025010 EXPRESS FRACTIONS WHOSE DENOMINATORS ARE NOT FACTORS OF 100 AS DECI

0006025011 GIVEN ANY DECIMALS THROUGH 100,000, EXPRESS THEM AS FRACTIONS.

0006025012 WRITE ANY GIVEN DECIMAL THROUGH 100,000 IN WORD FORM AND IN NUMERIC

0006025013 SOLVE MULTIPLICATION PROBLEMS WITH RATIONALS IN DECIMAL FORM.

0006025014 SOLVES DIVISION PROBLEMS WITH RATIONALS IN DECIMAL FORM.

0006025015 GIVEN FRACTIONS WITH DENOMINATORS EXPRESSIBLE AS POWERS OF 10

0006025016 RECOGNIZE REPEATING DECIMALS.

0006030 DIVISION

0006030001 USE THE CONVENTIONAL DIVISION ALGORITHM.

0006030002 FIND THE QUOTIENT FOR A DIVISION PROBLEM WITH A 2,3 DIGIT DIVISOR.

0006030003 EXPRESS REMAINDER IN DIVISION PROBLEM AS A COMMON FRACTION IN SI

0006030004 GIVEN A DIVISION WORD PROBLEM WITH WHOLE NUMBERS, WRITE EQUATION

| | |
|---|---|
| LEMS WITH RATIONALS IN | DECIMAL FORM. |
| 00. | |
| ATORS ARE NOT FACTORS | OF 100 AS DECIMALS AND PERCENTS. |
| 000, EXPRESS THEM AS | FRACTIONS. |
| 100,000 IN WORD FORM | AND IN NUMERICAL FORM. |
| ITH RATIONALS IN | DECIMAL FORM. |
| ATIONALS IN DECIMAL | FORM. |
| RS EXPRESSIBLE AS | POWERS OF 10 TO 100,000, EXPRESS THEM AS DECIMALS. |
| | |
| | |
| LGORITHM. | |
| N PROBLEM WITH A 2,3 | DIGIT DIVISOR. |
| ROBLEM AS A COMMON | FRACTION IN SIMPLEST FORM. |
| ITH WHOLE NUMBERS, | WRITE EQUATION FOR PROBLEM AND SOLVE EQUATION. |

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|---|---|---|
| 0006035 | ESTIMATION | |
| 0006035001 | ESTIMATE AND COMPARE PERIMETERS OF POLYGONS, AS | RECTANGLES |
| 0006040 | EXPONENTIAL NOTATION | |
| 0006040001 | WRITE A NUMERAL IN EXPANDED FORM AS THE INDICATED SUM O THE NUMERAL FOR A NUMBER GIVEN IN EXPANDED FORM. | PRODUCTS O |
| 0006040002 | EXPRESS NUMBERS IN EXPANDED FORM BY USING EXPONENTIAL | NOTATION |
| 0006040003 | USE EXPONENTIAL NOTATION TO REPRESENT NUMBERS. | |
| 0006040004 | WRITE NUMBERS IN EXPANDED FORM WITH EXPONENTIAL | NOTATION. |
| 0006040005 | GIVEN A NUMBER IN EXPONENTIAL FORM, DESCRIBE THE BASE THE PRODUCT. | AND EXPONE |
| 0006045 | FRACTIONS | |
| 0006045001 | ADD UNLIKE FRACTIONS AND EXPRESS SUM IN LOWEST TERMS. | |
| 0006045002 | ADD 2 OR 3 LIKE FRACTIONS AND EXPRESS SUM IN | LOWEST TER |
| 0006045003 | SOLVES ADDITION PROBLEMS WITH UNLIKE FRACTIONS AND MIXED NUMBERS. | |
| 0006045004 | EXPRESS GIVEN FRACTIONS IN LOWEST TERMS. | |
| 0006045005 | SUBTRACT A FRACTION FROM A FRACTION WHEN REGROUPING IS | NOT NECESS |
| 0006045006 | SUBTRACT UNLIKE FRACTIONS AND EXPRESS THE DIFFERENCE IN | LOWEST TER |

TERS OF POLYGONS, AS RECTANGLES, TRIANGLES, PARALLELOGRAMS.

FORM AS THE INDICATED SUM O PRODUCTS OF EACH DIGIT AND A MULTIPLE OF TEN. WRITE VEN IN EXPANDED FORM.

FORM BY USING EXPONENTIAL NOTATION

REPRESENT NUMBERS.

ORM WITH EXPONENTIAL NOTATION.

AL FORM, DESCRIBE THE BASE AND EXPONENT, WRITE AS PRODUCT OF LIKE FACTORS. FIND

PRESS SUM IN LOWEST TERMS.

ND EXPRESS SUM IN LOWEST TERMS.

TH UNLIKE FRACTIONS AND MIXED NUMBERS.

LOWEST TERMS.

FRACTION WHEN REGROUPING IS NOT NECESSARY AND WRITE THE DIFFERENCE IN LOWEST TERMS.

ND EXPRESS THE DIFFERENCE IN LOWEST TERMS.

| | |
|---|---|
| 0006045007 | STUDENT SOLVES SUBTRACTION PROBLEMS WITH UNLIKE FRACTIONS AND |
| 0006045008 | MULTIPLY FRACTIONS OR MIXED FRACTIONS BY A WHOLE NUMBER AND EXPRESS TH |
| 0006045009 | MULTIPLY A FRACTION BY A FRACTION, A FRACTION BY A MIXED NUMBER, OR A M EXPRESS THE ANSWER IN LOWEST TERMS. |
| 0006045010 | SOLVE MULTIPLICATION PROBLEMS IN FRACTIONAL FORM. |
| 0006045011 | SOLVE DIVISION PROBLEMS IN FRACTIONAL FORM. |
| 0006045012 | DIVIDE A WHOLE NUMBER BY A FRACTION OR A MIXED NUMBER, AND DIVIDE A F NUMBER. |
| 0006045013 | DIVIDE A FRACTION BY A FRACTION OR A MIXED FRACTION, AND DIVIDE A MIXED |
| 0006060 | GEOMETRY (PLANE FIGURES) - CIRCLE - |
| 0006060001 | FIND THE AREA OF A CIRCLE USING THE CORRECT FORMULA. |
| 0006060002 | RECOGNIZE THE RELATIONSHIP BETWEEN THE CIRCUMFERENCE AND THE DIAMET |
| 0006060003 | FIND THE CIRCUMFERENCE OF A CIRCLE USING THE CORRECT FORMULA. |
| 0006065 | GEOMETRY (PLANE FIGURES) - CONGRUENCE - |
| 0006065001 | USING A COMPASS AND/OR STRAIGHTEDGE, FIND WHETHER TWO LINE SEGMENTS CONGRUENT, AND WHETHER TWO TRIANGLES ARE CONGRUENT. |

EMS WITH UNLIKE FRACTIONS AND MIXED NUMERALS.

TIONS BY A WHOLE NUMBER AND EXPRESS THE ANSWER IN LOWEST TERMS.

N, A FRACTION BY A MIXED NUMBER, OR A MIXED FRACTION BY A MIXED NUMBER, AND MS.

FRACTIONAL FORM.

IONAL FORM.

ION OR A MIXED NUMBER, AND DIVIDE A FRACTION OR A MIXED FRACTION BY A WHOLE

OR A MIXED FRACTION, AND DIVIDE A MIXED FRACTION BY A MIXED FRACTION.

E -

THE CORRECT FORMULA.

EN THE CIRCUMFERENCE AND THE DIAMETER OF A CIRCLE.

LE USING THE CORRECT FORMULA.

UENCE -

DGE, FIND WHETHER TWO LINE SEGMENTS ARE CONGRUENT, WHETHER TWO ANGLES ARE GLES ARE CONGRUENT.

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|---|---|
| 0006070 | GEOMETRY (PLANE FIGURES) - CONSTRUCTIONS - |
| 0006070001 | USING A PROTRACTOR AND A STRAIGHTEDGE, CONSTRUCT AND MEASURE A 2 DEGREES. |
| 0006070002 | USING A COMPASS, CONSTRUCT THE BISECTOR OF A GIVEN ANGLE. |
| 0006070003 | GIVEN THE DIAMETER OR RADIUS OF A CIRCLE, USE A COMPASS TO CONSTR |
| 0006080 | GEOMETRY (PLANE FIGURES) - LINES - |
| 0006080001 | IDENTIFIES PARALLEL, INTERSECTING, AND PERPENDICULAR LINES. |
| 0006080002 | CONSTRUCT PARALLEL LINES. |
| 0006080003 | CONSTRUCT A LINE PERPENDICULAR TO A GIVEN LINE. |
| 0006110 | GEOMETRY (PLANE FIGURES) - SYMBOLS AND NOTATION - |
| 0006110001 | GIVEN AN ILLUSTRATION OF A GEOMETRIC FIGURE, DESCRIBE IT USING THE |
| 0006120 | GEOMETRY (PLANE FIGURES) - TERMINOLOGY - |
| 0006120001 | DEMONSTRATE KNOWLEDGE OF BASIC TERMS RELATED TO GEOMETRY. |
| 0006125 | GEOMETRY (PLANE FIGURES) - TRIANGLE - |
| 0006125001 | SOLVE PROBLEMS INVOLVING THE MEASUREMENT OF INACCESSIBLE HEIGHTS A SIMILAR TRIANGLES. |

AIGHTEDGE, CONSTRUCT AND MEASURE ANGLES; THE MEASURE SHOULD BE CORRECT TO WITHI

HE BISECTOR OF A GIVEN ANGLE.

OF A CIRCLE, USE A COMPASS TO CONSTRUCT THE CIRCLE.

INES -

CTING, AND PERPENDICULAR LINES.

AR TO A GIVEN LINE.

YMBOLS AND NOTATION -

EOMETRIC FIGURE, DESCRIBE IT USING THE CORRECT SYMBOL.

ERMINOLOGY -

IC TERMS RELATED TO GEOMETRY.

RIANGLE -

MEASUREMENT OF INACCESSIBLE HEIGHTS AND DISTANCES INDIRECTLY USING THE PROPERTIES O

0006125002 RECOGNIZE THE PROPERTIES OF ISOSCELES TRIANGLES, SCALENE TRIAN
THE FACT THAT THE LONGEST SIDE OF A TRIANGLE IS OPPOSITE THE ANGLE OF

0006125003 FIND VOLUME OF A TRIANGLE USING U = 1/2 BH.

0006130 GEOMETRY (SIZE AND SHAPE)

0006130001 ESTIMATE THE AREA OF AN IRREGULAR PLANE REGION BY USE OF A GRID WHERE
OF THE INNER AND OUTER AREAS.

0006135 GEOMETRY (SOLIDS)

0006135001 GIVEN CLOSED SURFACES, IDENTIFIES A RIGHT PRISM.

0006135002 GIVEN CLOSED SURFACES, IDENTIFIES PYRAMIDS, CYLINDERS, AND CONES.

0006135003 MAKE MODELS OF VARIOUS PRISMS AND FIND THEIR SURFACE AREAS.

0006135004 FIND THE VOLUME OF A RECTANGULAR PRISM.

0006135005 CONSTRUCT THE SEVEN SOMA PIECES WHEN GIVEN PICTURES OF THEM.

0006135006 CONSTRUCT MODELS OF SPACE FIGURES (SPHERE, CYLINDER, CONE, PRISM,

0006135007 GIVEN STRUCTURE OR PICTURE OF A STRUCTURE OF SOMA PIECES, CONST

0006140 GEOMETRY (SPACE RELATIONSHIPS)

ROSCELES TRIANGLES, SCALENE TRIANGLES, AND EQUILATERAL TRIANGLES, SUCH AS
E OF A TRIANGLE IS OPPOSITE THE ANGLE OF GREATEST MEASURE.

NG U = 1/2 BH.

ULAR PLANE REGION BY USE OF A GRID WHERE AN APPROXIMATION TO THE AREA IS THE AVERAGE

IES A RIGHT PRISM.

IES PYRAMIDS, CYLINDERS, AND CONES.

AND FIND THEIR SURFACE AREAS.

AR PRISM.

S WHEN GIVEN PICTURES OF THEM.

RES (SPHERE, CYLINDER, CONE, PRISM, AND PYRAMID).

A STRUCTURE OF SOMA PIECES, CONSTRUCT A DUPLICATE.

| | | |
|---|---|---|
| 0006140001 | IDENTIFIES SETS OF POINTS INSIDE, ON, OR OUTSIDE A | CLOSED SURF |
| 0006140002 | RECOGNIZE THAT A LINE AND A PLANE ARE BOTH SUBSETS OF | SPACE. |
| 0006140003 | RECOGNIZE THAT A LINE (ONE DIMENSIONAL SPACE) IS A | SUBSET OF A |
| 0006140004 | RECOGNIZE THE REFLECTION OF A PLANE FIGURE IN A MIRROR | AND DRAW DI |
| 0006145 | GRAPHS | |
| 0006145001 | CONSTRUCT A PICTURE GRAPH USING DATA PRESENTED IN A | DIFFERENT F |
| 0006145002 | CONSTRUCT A LINE GRAPH USING DATA PRESENTED IN A | DIFFERENT F |
| 0006145003 | CONSTRUCT A BAR GRAPH USING DATA PRESENTED IN A | DIFFERENT F |
| 0006145004 | CONSTRUCT A CIRCLE GRAPH USING DATA PRESENTED IN A | DIFFERENT F |
| 0006145005 | COLLECTS DATA. | |
| 0006145006 | REPRESENTS DATA IN TABLES AND GRAPHS. | |
| 0006145007 | INTERPRETS DATA. | |
| 0006180 | MEASUREMENT (LINEAR) | |
| 0006180001 | MEASURES LENGTHS OF OBJECTS IN EIGHT AND SIXTEENTH | INCHES. |

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|---|---|
| NSIDE, ON, OR OUTSIDE A | CLOSED SURFACE. |
| PLANE ARE BOTH SUBSETS OF | SPACE. |
| DIMENSIONAL SPACE) IS A | SUBSET OF A PLANE (TWO-DIMENSIONAL SPACE). |
| A PLANE FIGURE IN A MIRROR | AND DRAW DIAGRAMS. |
| | |
| SING DATA PRESENTED IN A | DIFFERENT PICTURE GRAPH. |
| G DATA PRESENTED IN A | DIFFERENT LINE GRAPH. |
| DATA PRESENTED IN A | DIFFERENT BAR GRAPH. |
| ING DATA PRESENTED IN A | DIFFERENT CIRCLE GRAPH. |
| | |
| ND GRAPHS. | |
| | |
| IN EIGHT AND SIXTEENTH | INCHES. |

0006180002 USE THE METRIC SYSTEM OF MEASURE FOR LENGTH.

0006180003 USING ENGLISH UNITS, MAKE LINEAR MEASUREMENTS TO A GIVEN LEVEL OF SIMPLEST TERMS.

0006185 MEASUREMENT (LIQUID)

0006185001 USING ENGLISH UNITS, MAKE LIQUID MEASUREMENTS TO A GIVEN LEVEL OF SIMPLEST TERMS.

0006190 MEASUREMENT (PRECISION)

0006190001 EXPLAIN WHY MEASUREMENTS ARE NOT COMPLETELY ACCURATE AND WHAT IS MEANT

0006190002 WORK WITH APPROXIMATE NUMBERS. FOR EXAMPLE, KNOW THAT THE AREA OF A INCHES TO THE NEAREST HUNDREDTH OF AN INCH AS AN AREA BETWEEN 6.4 X

0006205 MEASUREMENT (TEMPERATURE)

0006205001 RECORD TO THE NEAREST DEGREE TEMPERATURE READINGS ON THE FAHRENHEIT SCA

0006210 MEASUREMENT (TIME)

0006210001 EXPRESS TIME GIVEN ON 24 HOUR BASIS, ON A 12 HOUR BASIS AND VICE VERSA

0006220 MULTIPLICATION

0006220001 FIND THE PRODUCT OF 2 NUMBERS, EACH NUMBER HAVING 2 OR MORE DIGITS.

FOR LENGTH.

MEASUREMENTS TO A GIVEN LEVEL OF ACCURACY AND RECORD YOUR MEASURES IN

MEASUREMENTS TO A GIVEN LEVEL OF ACCURACY AND RECORD YOUR MEASURES IN

COMPLETELY ACCURATE AND WHAT IS MEANT BY STANDARD UNITS OF MEASURE.

FOR EXAMPLE, KNOW THAT THE AREA OF A RECTANGLE WHOSE SIDES MEASURE 6.5 AND 3.6
OF AN INCH AS AN AREA BETWEEN 6.4 X 3.5 AND 6.6 X 3.7 SQUARE INCHES.

PERATURE READINGS ON THE FAHRENHEIT SCALE.

SIS, ON A 12 HOUR BASIS AND VICE VERSA.

ACH NUMBER HAVING 2 OR MORE DIGITS.

0006220002 GIVEN A WORD PROBLEM INVOLVING MULTIPLICATION OF WHOLE NUMBERS, W
EQUATION.

0006230 NUMBER SYSTEMS (EARLY)

0006230001 AFTER EXAMINING NUMBER SYSTEMS OTHER THAN OUR OWN, THE STUDENT WI
NUMBER SYSTEM.

0006235 NUMBERS (INTEGERS)

0006235001 RECOGNIZE THE USE OF THE NUMBER LINE IN THE EXPLANATION OF INTEGER

0006235002 GIVEN AN INTEGER, RECOGNIZE WHETHER IT IS LESS THAN, EQUAL TO,

0006235003 RECOGNIZE THAT THE INTEGERS (POSITIVE AND NEGATIVE WHOLE NUMBERS AN

0006235004 DETERMINE GREATER THAN, LESS THAN, AND BETWEENNESS FOR (POSITIVE

0006235005 FIND THE ADDITIVE INVERSE (OPPOSITE) AND EACH INTEGER BY USING THE

0006235006 RECOGNIZE INTEGERS AS NEGATIVE NUMBERS.

0006235007 ADD INTEGERS.

0006235008 USE THE COMMUTATIVE PROPERTY OF ADDITION FOR INTEGERS.

0006235009 FIND THE DIFFERENCE BETWEEN TWO INTEGERS.

0006235010 SOLVE WORD PROBLEMS REQUIRING THE ADDITION OF TWO INTEGERS.

ING MULTIPLICATION OF WHOLE NUMBERS, WRITE AN EQUATION FOR THE PROBLEM AND SOLVE THE

EMS OTHER THAN OUR OWN, THE STUDENT WILL LIST A MINIMUM OF TWO ADVANTAGES OF OUR

MBER LINE IN THE EXPLANATION OF INTEGERS.

WHETHER IT IS LESS THAN, EQUAL TO, OR GREATER THAN ANOTHER GIVEN INTEGER.

(POSITIVE AND NEGATIVE WHOLE NUMBERS AND ZERO) ARE AN EXTENSION OF THE WHOLE NUMBERS.

S THAN, AND BETWEENNESS FOR (POSITIVE, NEGATIVE, AND ZERO) INTEGERS.

OPPOSITE) AND EACH INTEGER BY USING THE NUMBER LINE.

IVE NUMBERS.

Y OF ADDITION FOR INTEGERS.

TWO INTEGERS.

NG THE ADDITION OF TWO INTEGERS.

| | |
|---|---|
| 0006235011 | GRAPH ORDERED PAIRS OF INTEGERS ON A COORDINATE SYSTEM. |
| 0006235012 | RECOGNIZE THAT THERE IS NO SMALLEST OR LARGEST RATIONAL NUMBER BETWEE |
| 0006245 | NUMBERS (RATIONAL AND IRRATIONAL) |
| 0006245001 | IDENTIFY RATIONAL NUMBERS FROM SETS OF EQUIVALENT FRACTIONS. |
| 0006245002 | COMPLETE EQUATIONS DEALING WITH EQUALITY AND INEQUALITY OF RATIONAL N |
| 0006245003 | DEFINE VOCABULARY OF TERMS USED IN CONNECTION WITH THE STUDY OF FRAC |
| 0006245004 | USE NEGATIVE NUMBERS IN MANY DIFFERENT SITUATIONS. |
| 0006245005 | RECOGNIZE THAT 1/1 OR 1 IS AN IDENTITY ELEMENT FOR MULTIPLICATIO |
| 0006245006 | MULTIPLY RATIONAL NUMBERS. |
| 0006245007 | USE THE COMMUTATIVE PROPERTIES OF MULTIPLICATION FOR RATIONAL NUMB |
| 0006245008 | USE THE ASSOCIATIVE PROPERTY OF MULTIPLICATION FOR RATIONAL NUMB |
| 0006245009 | USE THE DISTRIBUTIVE PROPERTY OF MULTIPLICATION WITH RESPECT TO AD |
| 0006245010 | RECOGNIZE THE MULTIPLICATIVE INVERSE (RECIPROCAL) FOR EVERY POSITIV THE DIVISION OF RATIONAL NUMBERS. |
| 0006245011 | RELATE CONCEPTS OF DECIMALS TO RATIONAL NUMBERS AND LONG DIVISION. |

ON A COORDINATE SYSTEM.

LEST OR LARGEST RATIONAL NUMBER BETWEEN TWO POSITIVE INTEGERS.

L)

SETS OF EQUIVALENT FRACTIONS.

EQUALITY AND INEQUALITY OF RATIONAL NUMBERS.

IN CONNECTION WITH THE STUDY OF FRACTIONS AND RATIONAL NUMBERS.

FFERENT SITUATIONS.

DENTITY ELEMENT FOR MULTIPLICATION IN THE SET OF RATIONAL NUMBERS.

OF MULTIPLICATION FOR RATIONAL NUMBERS.

MULTIPLICATION FOR RATIONAL NUMBERS.

F MULTIPLICATION WITH RESPECT TO ADDITION OF RATIONAL NUMBERS.

VERSE (RECIPROCAL) FOR EVERY POSITIVE RATIONAL NUMBER EXCEPT ZERO AND USE IT I
S.

RATIONAL NUMBERS AND LONG DIVISION.

0006245012 RECOGNIZE THAT THE OPERATION OF DIVISION IS THE INVERSE OF MULTIP
NUMBERS.

0006245013 DIVIDE RATIONAL NUMBERS.

0006245014 RECOGNIZE THAT THE RATIONAL NUMBERS (POSITIVE AND NEGATIVE
AND ZERO) ARE AN EXTENSION OF THE INTEGERS.

0006245015 RECOGNIZE THAT THE RATIONAL NUMBER SYSTEM IS DENSE; THAT IS,
THERE IS A RATIONAL NUMBER.

0006250 NUMBERS (WHOLE)

0006250001 USE THE DISTRIBUTIVE LAW FOR MULTIPLICATION OVER ADDITION

0006250002 DEMONSTRATE WHETHER OR NOT THE OPERATIONS OF ADDITION AND SUBTR

0006250003 DEMONSTRATE WHETHER OR NOT THE OPERATIONS OF DIVISION
ASSOCIATIVE.

0006250004 DEMONSTRATE WHETHER OR NOT THE OPERATIONS OF DIVISION
ASSOCIATIVE.

0006250005 USE THE DISTRIBUTIVE LAW FOR DIVISION OVER ADDITION AND SUBTRACTI

0006250006 DEMONSTRATE WHETHER OR NOT THE OPERATIONS OF DIVISION

0006265 PERCENTAGE

0006265001 INTERPRET PERCENT AS A RATIO IN WHICH THE SECOND NUMBER IS ALWAYS

0006265002 RELATE PERCENT NOTATION TO FRACTIONS AND DECIMALS.

N OF DIVISION IS THE INVERSE OF MULTIPLICATION IN THE SET OF POSITIVE RATIONAL

NUMBERS (POSITIVE AND NEGATIVE WHOLE NUMBERS, POSITIVE AND NEGATIVE FRACTIONS
OF THE INTEGERS.

NUMBER SYSTEM IS DENSE; THAT IS, BETWEEN EACH TWO DIFFERENT RATIONAL NUMBERS,

R MULTIPLICATION OVER ADDITION AND SUBTRACTION.

THE OPERATIONS OF ADDITION AND SUBTRACTION ARE COMMUTATIVE AND ASSOCIATIVE.

THE OPERATIONS OF DIVISION AND MULTIPLICATION ARE COMMUTATIVE AND

THE OPERATIONS OF DIVISION AND MULTIPLICATION ARE COMMUTATIVE AND

R DIVISION OVER ADDITION AND SUBTRACTION USING ONE PLACE DIVISORS.

THE OPERATIONS OF DIVISION AND MULTIPLICATION HAVE AN IDENTITY ELEMENT.

O IN WHICH THE SECOND NUMBER IS ALWAYS 100.

FRACTIONS AND DECIMALS.

0006265003 SOLVE PROBLEMS INVOLVING PERCENTAGE DISCOUNT.

0006265004 SOLVE ALL THREE CASES OF PERCENTAGE PROBLEMS AS PROBLEMS IN WHICH THEY
RATIOS.

0006270 PLACE VALUE

0006270001 EXPRESS ORALLY AND WRITE NUMERALS FOR NUMBERS TO BILLIONS.

0006270002 DESCRIBE THE PLACE VALUE OF EACH DIGIT OF A NUMBER TO BILLIONS AND G

0006275 PROBABILITY

0006275001 CARRIES OUT SIMPLE EXPERIMENTS IN PROBABILITY.

0006275002 RECORDS SIMPLE EXPERIMENTS IN PROBABILITY.

0006275003 INTERPRETS RESULTS FROM SIMPLE EXPERIMENTS IN PROBABILITY.

0006280 PROPORTION

0006280001 USE PROPORTIONS IN PROBLEMS ABOUT THE LENGTH OF SIDES IN SIMILAR TRIANG

0006285 RATIO

0006285001 USE EQUIVALENT RATIOS TO CONVERT FRACTIONS TO DECIMALS AND CONVERSELY

NTAGE DISCOUNT.

NTAGE PROBLEMS AS PROBLEMS IN WHICH THEY FIND THE MISSING TERM OF TWO EQUIVALENT

ALS FOR NUMBERS TO BILLIONS.

CH DIGIT OF A NUMBER TO BILLIONS AND GIVE THE DIGITS VALUE IN EXPANDED FORM.

IN PROBABILITY.

PROBABILITY.

EXPERIMENTS IN PROBABILITY.

OUT THE LENGTH OF SIDES IN SIMILAR TRIANGLES.

T FRACTIONS TO DECIMALS AND CONVERSELY.

0006285002 SOLVE RATIO PROBLEMS WHERE SOME OR ALL OF THE TERMS OF THE RATIO

0006285003 RELATE RATIOS TO GEOMETRY.

0006290 SCIENTIFIC NOTATION

0006290001 EXPRESS LARGE NUMBERS BY USING SCIENTIFIC NOTATION.

0006310 STATISTICS

0006310001 DETERMINES AVERAGE BY PERFORMING THE APPROPRIATE PROBLEM SITUATION

0006315 SUBTRACTION

0006315001 SUBTRACT NUMBERS WITH 3 OR MORE DIGITS.

0006315002 GIVEN A WORD PROBLEM INVOLVING ADDITION AND/OR SUBTRACTI
PROBLEM AND SOLVE THE EQUATION.

SOME OR ALL OF THE TERMS OF THE RATIOS ARE WRITTEN AS DECIMALS.

SING SCIENTIFIC NOTATION.

ORMING THE APPROPRIATE PROBLEM SITUATIONS.

MORE DIGITS.

VING ADDITION AND/OR SUBTRACTION OF WHOLE NUMBERS, WRITE AN EQUATION FOR THE
TION.